

EFFECTS OF STAGE PRESENCE ON PERCEPTIONS OF INSTRUMENTAL
PERFORMANCE IN WESTERN CLASSICAL MUSIC

BY

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Table of Contents

Acknowledgements	iv
Tables	v
Introduction	1
Chapter 1: Related Pedagogical and Empirical Literature	7
Chapter 2: Study 1—Physical Behaviors Survey	33
Chapter 3: Study 2—Performance Evaluation Questionnaire	40
Chapter 4: Discussion of Results	57
Appendix 1: Physical Behaviors Survey	75
Appendix 2: Results from Physical Behaviors Survey	77
Appendix 3: Performance Evaluation Questionnaire	83
Bibliography	85

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Tables

3.1	Performer Characteristics	42
3.2	Chosen Positive and Negative Behaviors for Each Performer	46
3.3	Scores for Quality Question (Audio vs. Video)	51
3.4	Scores for Attendance Question (Audio vs. Video)	52
3.5	Scores for Quality Question (Positive vs. Negative)	53
3.6	Scores for Attendance Question (Positive vs. Negative)	54
3.7	Correlations with "Number of Years Playing a Musical Instrument"	56
A2.8	Frequencies for Positive Physical Behaviors	77
A2.9	Frequencies for Negative Physical Behaviors	78

Introduction

A superlative musical performance is, by nature, a nebulous and difficult concept to pin down. Each member of an audience has his or her own standards and ideals from which to measure, which may be influenced by the audience member's background and musical expertise, and/or relationship and history with the piece and the performer. Even factors as mundane as the mood he or she is in and the company he or she is with can play a role in such evaluation. Yet, there are certain performers who are nearly universally hailed as masters, those people who are immediately compelling from the very second that they step out on stage. No great leap of faith is required to believe that there are many non-musical factors that influence these beliefs in addition to the aural experience. Indeed, the musical market bears this out time and time again—what else can account for the vast price difference between live performance and audio recordings, even when the recordings have endless replay value and could often be technically considered to possess higher audio quality? There simply must be something additional that the great artists put into their live performances to draw in listeners and create an extra-musical experience. And if the aural experience alone cannot account for the difference, then at least part of the deciding variable must be visual in nature.

Of course, this is an idea that teachers and pedagogues have been familiar with for quite some time. Preliminary research for this project indicates that the overwhelming majority of music teachers consider a performer's stage presence and body language to be an important component of his or her overall performance. And yet, concrete ideas on what makes for good stage presence are often a source of disagreement—reflecting the

commonly used adage, "I can't describe it but I know it when I see it!" If it is possible to create a more enjoyable musical experience, as the great performers often do by visual presence alone, it stands to reason that it is also possible that some types of visual presence may detract from such enjoyment. As such, visual communication needs to be taught alongside other aspects of musicianship.

As a student at two large music schools, I have had the opportunity to witness hundreds of student performances over a period of about a decade. I have seen eighteen-year-old musicians look so effortless and natural in their performance that it appeared they had been born on stage, and I have watched recitals and concerts that made me uncomfortable enough to warrant closing my eyes. I have noticed that vocalists, more so than instrumentalists, seem to have spent time studying and practicing the visual aspect to their performance, refining and honing it until it did not appear at all contrived. Many instrumentalists, on the other hand, have a far easier time "hiding" behind their instrument or the music stand, using an inanimate object to create a barrier between themselves and the audience. This is particularly true in those programs of study that focus heavily on orchestra or wind band performance, where individual musicians can become anonymous within the confines of a large ensemble. In these types of groups, the visual goal is often merely uniformity—not sticking out from either the others around oneself *and* conforming to the traditional body language of that ensemble. While that concept certainly has stood the test of time, it holds up poorly in solo or small group performance where the attention of the audience is focused squarely on individual musicians. Instrumentalists competing for audiences and attention in a twenty-first century world of musical globalization can scarcely afford to ignore one of the primary

components of a musical *performance*—how much different would the careers and popularity of Elvis Presley, Michael Jackson, and Bruce Springsteen have been without the visual elements which formed an integral part of their acts? Of course, it certainly is important to take into account the necessity for stage behavior to conform to musical and cultural norms, both those that relate to the genre of music being performed and those that are dependent on the location and historical context of performer, performance location, and the music being played.

This concept shows up with particular clarity within the genre of Western classical music. In a time where the traditional models of arts funding and dissemination seem constantly under attack, it so often falls to the performers to justify their craft. With nearly universal access to recorded music as well as the online and mobile services such as YouTube and Spotify, live music is both more unnecessary and more crucial to the development and sustainability of the art than it has ever been. As an example, consider a typical symphony orchestra concert. The group is separated from the audience by a stage, and in dresses or tuxedos—far more formal than their patrons yet designed in a way that each musician blends in with those around them. After walking out, the conductor turns his or her back on the audience. Musicians pride themselves on avoiding visual distractions, with players often trying to move together to show uniformity within their sections. Even the most superlative musical performances tend to be less than compelling visually. While this may have been a model that has worked in the past, in a time when major organizations are restructuring their finances or even closing their doors, classical music is clearly approaching a new paradigm that will challenge musicians to interact and connect with their audience in unexplored ways.

Borrowing a concept that popular musicians have realized for decades, it is clear that visual components of performance will become a large part of the live performance medium, one that is clearly still in demand. Research in this paper will clearly demonstrate that, even in the classical genre, potential audience members still respond better to performances that they can view visually than those that they only hear. The research will also show that those audience members are far more likely to return to see additional performances. Assuming this premise, it is even more important for performers to complement their musicianship with appropriate visuals and body language—collectively known as "stage presence."

Many of the teachers and pedagogues with whom I have worked intuitively understand that stage presence and body language are important components of performance. But exactly how these elements interact and affect the musical side is a far more difficult concept to explain. Luciano Pavarotti and Itzhak Perlman are often considered to be consummate performers who can convince an audience of their greatness by simply stepping out on the stage. What is it about their physical mannerisms that can so quickly and masterfully seduce listeners? This is a question that pedagogues often struggle to answer—and even when it is possible to analyze the visual components of a great performance, there is still the challenge of having to teach it to one's students. Partly this could be an issue of perspective. Teachers (in many respects, musicians in general) have been conditioned and trained for their entire careers to break down and critique every miniscule element of a performance. But they often by necessity become almost myopically focused on the aural elements, to the exclusion of the "big picture," the overall effect of a performance. In addition, their level of familiarity with both the

music and the instrument creates a level of bias that can unconsciously hinder this process further. Trumpet players critiquing each other, well acquainted with the technical abilities and challenges of the instrument as well having a greater command of the standard literature, often focus on far different aspects of performance than do violinists, percussionists, or singers listening to the same player. If these differences show up even within the community of trained musicians, what will audience members unschooled in these techniques use to determine the value and quality of a performance?

Studies have shown that in many cases, the perception of a great performance can actually create that reality in the minds of many listeners. Almost forty years ago, researchers in the "Dr. Fox" experiment showed that the experience of listening to a compelling lecture could actually overshadow the content of the lecture.¹ In the study, an actor was hired to give a command performance of a medical lecture to several different panels of professionals and graduate students, varying both the content of the lecture and the "seductiveness" of delivery. The researchers found that ratings of the lecture were extremely high when it was delivered with humor, energy, and a positive attitude, despite the fact that the actual content was confusing, misleading, and in some cases, incorrect. Such research findings may easily be generalized to musical performance. Many audience members do not have the degree of specialized training to discern minute differences between musical performances, thus their opinions of the overall performance may be swayed more by what is visually appealing than just the aural experience itself. Clearly, performing musicians need to be aware of the body language that they are exhibiting—even to the point where they use stage presence to enhance performance. While it seems slightly disingenuous to the audience (and often, classical musicians are

¹ Ware and Williams, 149-156.

reluctant to concern themselves with performance practices not directly related to the musical product), this can be of use to performers looking to increase their audience appeal.

In order to investigate the effects of stage presence further, the research presented in this paper has several different components, beginning first with a broad survey of perceptions and attitudes about stage presence and body language by a wide body of instrumental music teachers. While numerous pedagogical accounts exist that detail the components of good stage presence and techniques for teaching them, this will be the first large-scale survey intended to collect body language data from a wide variety of instructors across various instruments. Using the information collected in the survey, it will be possible to make broad generalizations about contemporary attitudes on stage presence and thus design a method of statistically testing these hypotheses. The second large part of the project will build off of research from the past several decades, using observers to evaluate audio and video recorded performances displaying both positive and negative components of stage behavior. Results of this research will shed light on which elements of physical behavior in performers have a greater impact on an audience's evaluation of a performance, allowing the development of more specific and updated pedagogical resources predicated on the assumption that positive stage presence can be taught and is integral to good musicianship.

Chapter 1

Related Pedagogical and Empirical Literature

The concept of stage presence is by nature a difficult and ambiguous one to define, but one that crosses all boundaries of performance. Various dancers have described what stage presence means to them as "...is essentially my personality coming out onstage," "...starts with being comfortable with what you're doing," and "...is the ability to seamlessly mesh these two parts of tap, dance and music, while at the same time interacting with your fellow dancers and the audience."¹ Hagberg defines stage presence as the visual component of live performance, from the physical behaviors of walking on stage, bowing, and facial expression to external factors such as music stands and stage management.² Whether or not a performer attends to these matters frequently goes unnoticed by audience members at a conscious level, but contributes strongly to the overall perception of the performance. Literature on the topic can generally be divided into two broad categories. First is the body of experiential accounts by musicians, primarily intended for pedagogic use, that typically are compiled from the author's own expertise without using experimental or statistical methodology. The second group is comprised of empirical and statistical literature, generally designed to test one or more of the pedagogic principles in a more scientific manner. Because the studies contained in this paper will draw upon both bodies of literature, I will begin first with a review of the relevant works.

¹ Holmes, 88-89.

² Hagberg, 2.

Assessing the value of a musical performance for a typical audience member is a subjective process carried out through either *norm-referenced* (comparing the performance to others) or *criteria-referenced* (determining how well the performance meets pre-determined criteria) means.³ While many of the criteria used to determine value are musically based, it is difficult to avoid extra-musical factors, some of which may be visual in nature.⁴ As Zegree puts it, "Many audiences listen with their eyes."⁵ Research by Schutz and Lipscomb supports this claim by testing the ability of visual and gestural information to affect the perceived duration of notes. A professional marimba performer was directed to play a series of different pitches using both long and short gestures. Evaluators under the audio-only condition were unable to reliably distinguish between notes of long and short duration, while under the audio-visual condition their perceived durations matched closely with the length of the gesture. According to the researchers, "while unable to alter the sound of the note, unbeknownst to the performer, his gesture serendipitously alters the way the note sounds, thereby (accidentally) overcoming a profound limitation of the instrument."⁶

The comparative lack of study of these visual factors could be due, in part, to the dominance in Western culture of recorded (non-live) music without any visual information; however, it is likely that visual cues provide great insights into performers'

³ McPherson and Schubert, 61-62.

⁴ Bermingham, 3-7.

⁵ Zegree, 86.

⁶ Schutz and Lipscomb, 896.

intent, particularly for unskilled observers.⁷ At an extremely basic level, the visual aspect of performance can at least serve to focus a listener's attention on the musical event.⁸ Other elements can include performer attractiveness and stage behavior, physical movement, and social norms between the performer and audience.⁹ Often, these factors are not explicitly known to the performer, existing in a "blind area" that can be lessened through practice and study with teachers and coaches.¹⁰ A criteria-based approach to evaluation certainly has some value, particularly as pertaining to inter-rater reliability, but there is a large amount of anecdotal evidence that suggests evaluators would prefer a more holistic approach.¹¹ One interview subject commented:

I sit there not listening scratching my head thinking how do I assess this for dynamics. . . so the criteria business I find very distracting from the basic package. Like if I meet you as a human being, I don't say to you this and that about your hair or about your eyebrows or about the fact that you wear glasses. . . I get the total picture of you as a person and then I come out with a general statement that sums up my feelings about you as a person, for me that is all important.¹²

There is ample evidence that visual information can exert influence on acoustic judgment. The "McGurk effect" occurs when listeners hear one auditory signal while visually watching the production of a different one, resulting in them reporting hearing

⁷ Davidson, "What Does the Visual Information Contained in Music," 111.

⁸ Thompson, Graham, and Russo, 203-204.

⁹ McPherson and Schubert, 67-68.

¹⁰ Ibid., 76-77.

¹¹ Stanley, Brooker, and Gilbert, 51-54.

¹² Ibid., 52.

the visual signal or a combination of the two.¹³ While these studies were carried out using speech syllables, Saldaña and Rosenblum designed an experiment to test the "McGurk effect" on musical data.¹⁴ Using different lengths of bowed notes versus plucked notes on a cello, they found that there was significant influence on subjects' aural perception by the visual information, although this effect was not nearly as strong as a similar one using speech data. Further research will be necessary to replicate these results for other types of musical sounds that can be paired with corresponding visual information.

For certain musicians, the visual component to performance should be considered alongside the musical, particularly for singers who have their hands available to gesture freely.¹⁵ Indeed, Bean claims that as much as 60-70 percent of the communication that takes place between musician and audience is non-verbal.¹⁶ This increasingly more common attitude seems to break from some earlier attempts to develop more objective rating scales for performances, some of which did not take into account body language or stage behavior at all.¹⁷ Clearly, performers and teachers have implicitly understood for centuries the link between visual communication and audience connection, with

¹³ McGurk and MacDonald, 746-748; MacDonald and McGurk, 253-257.

¹⁴ Saldaña and Rosemblum, 406-416.

¹⁵ Coimbra, Davidson, and Kokotsaki 23-24.

¹⁶ Bean, 37.

¹⁷ Abeles, 246-255.

anecdotal evidence of this pedagogy dating back at least as far as C.P.E. Bach.¹⁸

Swanwick gets to the core of this problem, commenting:

Such a rich activity cannot be reduced to a single dimension, say that of 'technique'. On the other hand, it does not make sense to identify several different dimensions and assess them giving a separate mark for each – say for technique, expressiveness, and stylistic awareness – adding them up to get a single figure. When we conflate several observations we lose a lot of important information on the way. For instance, in competitive ice skating one performer might be given six out of ten for technique and nine for artistry, while another contender gets nine for technique and six for artistry. The sum of each set of marks happens to be the same – 15 – but the actual performances will be quite different. The fudge of adding a category called 'overall' only makes things worse.¹⁹

With a large body of evidence that visual stimuli play a role in the communication between musicians and their audiences, and the evaluation that simultaneously takes place during performance, it is necessary to have pedagogical techniques for developing and honing these skills. Many musicians, both performers and teachers, have written about some of these techniques, and the next section contains samples from this literature as well as the specific physical behaviors that comprise "stage presence."

Experiential/Pedagogical Literature

Considering the size of the vast body of pedagogical literature on music, stage presence often is given, at best, a cursory glance, in part because many musicians do not consider it on the same level of importance as aural and musical factors. A survey of European college music students found that, when asked how much they appreciate certain characteristics in performers, stage presence ranked near the bottom of the list, far

¹⁸ Glies, 22.

¹⁹ Swanwick, 6.

beneath expressivity and also under personal style and swing.²⁰ A study of music teachers that asked similar questions found results supporting this.²¹ Considering the copious research that shows the connection between physical movements and expressivity,²² stage behavior and body language could be considered an unconscious factor in performance evaluation, rarely judged specifically but certainly complicit in the perception of a performance by observers.²³ However, when researchers ask questions about performance in a holistic manner, they often find answers in which physical movements and presence are component or even major factors. In a questionnaire survey of university-level singers preparing for mid-semester assessments, Coimbra, Davidson, and Kokotsaki received numerous responses mentioning the word "confidence," used both in the context of an internal emotion and an external projection. Multiple students also mentioned "smiling" and "maintaining eye contact with audience" as desirable traits in performance. When asked about body movements, students often wrote about their efforts to minimize unnecessary, excessive, or unnatural gestures.²⁴ It is possible that performers who smiled more, maintained greater eye contact with the audience, and used more expressive gestures would be considered more attractive, which is shown to be an

²⁰ Lindström, Juslin, Bresin, and Williamon, 34.

²¹ Laukka, 45-56.

²² Davidson, "Visual Perception of Performance Manner," 103-113; Williamon, 91; Juchniewicz, 423.

²³ Wapnick, Kovacs Mazza, and Darrow, "Violin Performance Evaluation," 516; Wapnick, Kovacs Mazza, and Darrow, "Children's Piano Performances," 328.

²⁴ Coimbra, Davidson, and Kokotsaki, 19-29.

important trait in overall performance evaluations.²⁵ Eye contact, in particular, is seen as a major factor in presenting a performer as confident and credible across various disciplines.²⁶ While all parts of the body can be used to communicate expressive intent, the effect is often delivered most strongly through movements of the head.²⁷

In a questionnaire study given to students and professional musicians about the factors that might contribute to their enjoyment or lack of enjoyment of a concert, Thompson found that the answer "Performers appear nervous/uncomfortable" was one of the least-contributing factors. Participants thought that variable would detract less from the overall performance than more ambiguous factors such as "Performance doesn't 'move' me emotionally," "Performance lacks commitment/conviction," and "Don't feel engaged by the performance," all concepts that can have visual as well as aural components.²⁸ McPherson and Thompson were similarly ambiguous, equating stage presence to "the performers' ability to take risks and/or perform in a confident and outgoing manner."²⁹ However, they feel that visual and physical factors could have both a positive or negative impact on the overall performance, claiming that this is more likely when the performer appears "stiff, cold, relaxed, or emotionally involved."³⁰ Howard was more specific about describing stage behaviors, including "proper body alignment," "engaged facial expression consistent with meaning and mood of song text being

²⁵ Wapnick, Darrow, Kovacs, and Dalrymple, 477.

²⁶ Battersby, 15.

²⁷ Davidson, "Bodily Communication," 219.

²⁸ Thompson, 24.

²⁹ McPherson and Thompson, 15.

³⁰ Ibid., 21.

performed," "focused, consistent eye contact," "confident and poised vocal entrance," and "cue to pianist" among her criteria for formal stage behavior in a study of high school vocalists. Casual stage deportment, the converse, included the criteria "uneven distribution of body weight," "improper body alignment," "neutral or disengaged facial expression," "inconsistent, wandering eye contact," "visible physical tics or tension," and "unclear cue to piano."³¹ Beyond specific body motions, there is also a question of degree of motion. According to Davidson and Correia, too exaggerated of movement can create undesirable performance, in much the same way that too few movements can.³² They also feel that performances can be negatively affected by conflicts between the physical intentions of the musician and the scope/context of the performance environment.

It stands to reason that the question of physical behavior is moot if the view of the performer is partially or completely obscured from the audience. Boots contends that wherever practical, musical solos should be performed from memory, and Hagberg advocates a memorized approach, or at least, positioning the music stand in a way that the audience becomes unaware of its presence.³³ Supporting their claims, Williamon researched the effects of memorized performance on audience ratings, using a solo cellist.³⁴ The performer was videotaped performing under the following conditions: (1) not memorized, with a solid music stand partially obscuring the view of the performer; (2) memorized, yet still with a music stand obscuring the view; (3) memorized with no

³¹ Howard, 172.

³² Davidson and Correia, 245.

³³ Boots, 62; Hagberg, 21-22.

³⁴ Williamon, 84-95.

music stand; (4) same as Condition 1, but with the additional practice that came from memorizing the excerpt; and (5) not memorized, but with the camera at an angle so that the music stand did not obscure view. Participants were asked to rate the performances on quality, musicianship, technical proficiency, and communication with the audience. Results showed that the memorized performances received significantly higher ratings for all variables combined, and also that the unobstructed conditions led to higher performance ratings than the obstructed conditions. The effect was particularly large for those participants who were musicians themselves, suggesting that the knowledge of the difficulty of the memorization process and its implications on professional performance lead to a bias towards memorized performances. This contrasts somewhat with Davidson's findings that non-musicians are more strongly influenced by visual and physical information, and Williamson acknowledges that further research is necessary in this area.³⁵ Along similar lines, the size of one's instrument will play a part in how much visual information is conveyed during a typical performance, with a continuum ranging from instruments such as the tuba and string bass where nearly the entire body is covered to vocalists, the most visually exposed of any musician.³⁶ Consequently, vocal pedagogy often spends a great deal more time discussing aspects of body movement and stage behavior than do instrumentalists.³⁷

For a long time, the only available information on the pedagogy of body language among musicians was anecdotal and opinion-based; it is only within the past several decades that have seen the rise in empirical literature. However, much of this non-

³⁵ Davidson, "What Type of Information is Conveyed in the Body Movements," 279-301.

³⁶ Coimbra, Davidson, and Kokotsaki, 29-30.

³⁷ Hagberg, 95.

scientific scholarship still has validity as it comes from respected and renowned teachers and performers, many of whom have seen thousands of students over many decades of experience. This information will provide a good starting location to narrow down which specific physical behaviors need to be studied as a component of a musician's stage presence. One of the more holistic concepts often discussed was that of attitude, expressed by Scharnberg as "individuals that seem to radiate some sort of energy we might call 'charisma.' They can often charm an audience even beyond their great technical and musical abilities."³⁸ Expanding upon this, he prefers that a performer show "an air of confidence, comfort, and naturalness."³⁹ Of particular importance is the first few seconds when a musician first steps on stage. McPherson and Schubert suggest that first impressions of a performance are nearly as valuable an evaluative tool as listening to or viewing the entire performance.⁴⁰ This initially happens during Sorel's "long walk" between the stage entrance and performance position in center stage, one which she advocates should be "neither so slow that observers become impatient nor so fast that they gasp or choke with amusement. In other words, walking must be natural and brisk, the steps forceful and confident."⁴¹ In these cases, a negative first impression can often have a lasting effect that can be difficult to alter with new information.⁴² In a follow-up study to her examination of motion using point-light displays to determine musical intent,

³⁸ Scharnberg, 45.

³⁹ Ibid., 46.

⁴⁰ McPherson and Schubert, 71-72.

⁴¹ Sorel, 31.

⁴² Carston, 303-328.

Davidson found that only two seconds of evaluation were required to make such a judgment.⁴³ This is supported pedagogically by a quote from the violin virtuoso Carl Flesch: "The first impression which a personality makes on us is essentially influenced by its externals as well as by the tone of voice. The moment a violinist appears on the concert stage, his appearance alone gives the public an impression of his human and artistic being."⁴⁴ In order to make a powerful and convincing first impression, Robbins recommends to "enter with purpose, standing tall, and walking at a brisk pace."⁴⁵ Hagberg describes an attitude of "enthusiastic anticipation", walking neither too slow or fast, and holding the body relaxed with strong posture.⁴⁶ Zegree is more specific, suggesting a pace slightly faster than a standard leisurely stride, and to have stage movements planned as to find the most direct and efficient path.⁴⁷

The physical movements that performers make while performing seem particularly important, especially as they relate to the character of the music itself. This tension is described artfully by Ben-Or: "Ferocious movements of the arms, 'impressive' shaking of the head, facial and bodily contortions in the performance of any artist – whether singer, instrumentalist, or actor – do not mean that there is a real inner intensity in the artistic expression."⁴⁸ De Peyer further describes a negatively perceived physical

⁴³ Davidson, "Visual Perception of Performance Manner," 103-113; Davidson, What Type of Information is Conveyed," 279-301.

⁴⁴ Glise, 22.

⁴⁵ Robbins, 33.

⁴⁶ Hagberg, 13-14.

⁴⁷ Zegree, 91.

⁴⁸ Ben-Or, 84.

performance: "Some singers seem to be wearing a steel corset, or, on the contrary, have jerky movements and faces which contort in grimaces. There are wind players who move their instrument around as if it were a baton or a flag communicating a hysterical semaphore."⁴⁹ McClaren questions whether the correspondence between musical expression and matching physical behavior influences an audience member's perception of the overall performance, hypothesizing a preference for congruence in movement.⁵⁰ Specifically, Scharnberg bemoans the musician who interrupts the character of a beautiful slow movement with an abrupt gesture, and Robbins teaches to move the instrument into place before playing using movements that reflect the character of the piece to be performed.⁵¹ The same idea is discussed by Fried using conductors instead of performers, teaching that good conductors display musical nuance through their body language, stance, and facial expressions in addition to the expected hand, arm, and baton movements. He offers an exercise to aspiring conductors to practice walking to the podium using movements similar to the musical character of the upcoming piece, a drill that would work equally effectively for instrumental performers.⁵² Gellrich conducted a more specific exploration of the effects of learned physical movements on expressive intent, and found that gestures, even those unnecessary to the musical performance, can strengthen and explain expression.⁵³ This effect can demonstrate both positive and

⁴⁹ De Peyer, 126.

⁵⁰ McClaren, 55.

⁵¹ Scharnberg, 46; Robbins, 33.

⁵² Fried, 68-73.

⁵³ Gellrich, 177-178.

negative effects, as gestures not complementary to the musical expression can appear as tension in the performer. One of these negative gestures can be the rhythmic tapping of feet or other body parts that so many performers are taught to do from a young age, often appearing distracting to the audience.⁵⁴ It is possible that the knowledge level of the audience and familiarity with the music can be a determining factor in gestural benefits, according to Clarke and Davidson.⁵⁵ Physical movements can simultaneously serve as a guide for unfamiliar music, a distraction in ambiguous performances, and a hindrance when not carefully planned.

Many writers mention smiling as a great benefit to performers, particularly during the walk onstage and immediately after the performance.⁵⁶ A smile is an effective way of forming a bond with the audience as well as composing and relaxing the performer. Sincerity is important, however, as audience members can spot an insincere smile from a long distance across a concert hall.⁵⁷ Koronka also discusses eye contact with the audience as a beneficial trait, claiming its value in engaging the listeners.⁵⁸ This connection can be made at various points in the performance, from the entrance walk, to the bow, to during the music itself, although Hagberg recommends that instrumentalists

⁵⁴ Hagberg, 19.

⁵⁵ Clarke and Davidson, 88.

⁵⁶ Koronka, 62; Scharnberg, 46; Boots, 62; Sorel, 32.

⁵⁷ Hagberg, 14.

⁵⁸ Koronka, 62.

do not stare at the audience while playing (vocalists have greater flexibility in this arena).⁵⁹

Those authors that write for the benefit of classical musicians often discuss the art of the bow, the first chance that the performer has to connect with his or her audience.⁶⁰ Koronka describes a positive bow as one that is short, simple, and comfortable looking, supporting Sorel's teaching that the bow should be simple with the arms hanging loosely and naturally at one's sides.⁶¹ The most egregious bowing error is committed by keeping the head upright throughout the bow—the gesture that Hagberg describes as one that martial arts opponents use before combat—which subverts the humility of the gesture and makes audience members feel uncomfortable. She teaches a three-step process of bowing with a pause and eye contact with the audience on either side of the bow itself.⁶² Boots explains a range of motion between a slight incline of the body and a deep sweeping bow, and instructs performers to use only the amount of movement that matches their comfort level and normal physical demeanor.⁶³

One of the most obvious and most frequently mentioned purely negative traits displayed by musicians is a visible reaction to a mistake in performance. Both Schneiderman and Scharnberg advocate teaching students to accept that mistakes will

⁵⁹ Hagberg, 20.

⁶⁰ Sorel, 31-34.

⁶¹ Koronka, 62.

⁶² Hagberg, 15-16.

⁶³ Boots, 62.

occur in performance and that it is important to practice not reacting to them.⁶⁴ Robbins goes even further, instructing to remain deadpan after a mistake, or even to look happier, in the manner that Hagberg equates to professional ice skaters rising from an unintended fall while smiling broadly.⁶⁵ Another commonly mentioned negative behavior is the rather ambiguous concept of nervousness. Koronka explains, "Nervousness is contagious in performance. When a performer seems unconfident and anxious on stage, that anxiety is transmitted to the audience."⁶⁶ According to Gellrich, the root cause of many negatively perceived behaviors is physical tension, which often has the effect of obscuring the passage of expressive ideas between performer and audience. Certain performers (including famous ones) even have tension-based traits and movements that are so unique and distracting that listening to a recording almost becomes preferable to watching them in live performance.⁶⁷

Lehmann and Davidson present a list of well-defined categories into which stage movements can be classified: movements to show expression, direct communication to the audience or fellow performers (i.e. raising hands to indicate that audience members should sing along), to emphasis significant or virtuosic musical moments, extramusical factors (i.e. silencing the audience), and movements that describe and demonstrate the personality of the performer.⁶⁸ Many of these behaviors depend heavily on the musical genre, audience composition, and performance location to determine their

⁶⁴ Schneiderman, 84; Scharnberg, 46.

⁶⁵ Robbins, 33; Hagberg, 21.

⁶⁶ Koronka, 62.

⁶⁷ Gellrich, 170.

⁶⁸ Lehmann and Davidson, 554.

appropriateness and natural appearance, a component which also influences audience perception. Worth a brief mention is one of the most well known pedagogical methods for developing physical performance behaviors: the Alexander Technique, developed by actor F.M. Alexander. Primarily a theory of posture and body alignment, it has shown many positive tension-reduction and airflow benefits for musicians.⁶⁹ In a set of studies of musicians with Alexander training, performers showed improvement relative to the control group on overall musical performance as well as self-described anxiety and attitude about their performance.⁷⁰

One further question worth exploration is the chain of causality; in other words, we clearly see that the physical movements of a performer have influence on audiences' perception of the *overall performance*, but is it possible that improving one's physical presence can show a corresponding benefit in the *aural performance* only? Certainly many of the physical techniques described above either increase or diminish body tension, which directly affects the motions that a performer employs to create sound. In an essay on vocal tone production, Gruner asserts that "body control and body relaxation will influence the mind just as much as mind control will influence body tension or relaxation."⁷¹ Statements like this are often heard in the context of managing performance anxiety, and Gruner contends that a psychological approach to solving this common problem may not be entirely sufficient to overcome its physical manifestations. According to Hagberg, these are skills that will benefit from practice; although they come more naturally to some musicians than others, most performers would experience

⁶⁹ Ben-Or, 84-95.

⁷⁰ Valentine, 188-189.

⁷¹ Gruner, 62.

lessened anxiety and a greater degree of self-confidence through careful planning of their physical movements on stage, including walking and bowing.⁷²

In sum, there are a series of physical movements which show up repeatedly in pedagogical literature, and surprisingly little disagreement among writers as to their effects. Behaviors which seem to have positive effects on audience perception of the overall performance include: smiling, eye contact, a brisk confident walk onstage, bowing, movements in character with the music, and a sense of physical relaxation and comfort. Those behaviors which contribute negatively to the perception of performance include tension and nervousness, excessive instrument or body movement, movement out of character with the music, and most of all, allowing visible reactions to musical errors. The research studies described in the following section have statistically tested some of the factors above.

Empirical Research Studies

The most closely related research to this paper is a series of studies by Wapnick and others examining the effects of performer attractiveness, dress, and stage behavior on the evaluation of various types of performances. Wapnick, Darrow, Kovacs, and Dalrymple first looked only at the effects of attractiveness on performance ratings of vocalists.⁷³ Fourteen singers were videotaped and evaluated by a group of musicians who were divided into audio-only, video-only, and audio-visual subsets and rated. Those that watched video with no sound rated only attractiveness of the performers while the other two groups evaluated the musical performance itself. The results showed that for

⁷² Hagberg, 4-5.

⁷³ Wapnick, Darrow, Kovacs, and Dalrymple, 470-479.

male singers, there were no significant differences in the ratings between less and more attractive vocalists under the audio-only condition, but the audio-visual group significantly favored the more attractive singers. The more attractive female singers were rated significantly higher under both the audio-only and audio-visual conditions, leading Wapnick et al. to make no conclusions, although they believe that since the study used relatively inexperienced singers as the models, the results may not reproduce similarly with trained professionals. Ryan and Costa-Giomi found similar results in their study of young pianists, with the more attractive female performers receiving higher evaluation scores while the less attractive males were favored.⁷⁴ This research looked at evaluation results from all pianists that took part in the study, not just the most and least attractive as did Wapnick et al. Additionally, Ryan and Costa-Giomi found a stronger effect of attractiveness for the higher ranked pianists, suggesting that attractiveness bias is less pronounced for developing and less gifted musicians.⁷⁵

In a subsequent study, Wapnick, Kovacs Mazza, and Darrow used similar procedures to examine evaluations of college-aged violin players, this time studying dress and stage behavior as well as attractiveness.⁷⁶ Using the same methodology as the earlier study, they found first that videotaped performances were rated significantly higher than audio-only performances. In addition, they found that male performers received higher ratings than female performers under all conditions. The results also showed that violinists that received higher scores on dress and stage behavior benefitted from being evaluated under the audio-visual condition, although musicians that were lower rated on

⁷⁴ Ryan and Costa-Giomi, 141-154.

⁷⁵ Ibid., 151.

⁷⁶ Wapnick, Kovacs Mazza, and Darrow, "Violin Performance Evaluation," 510-521.

those two variables were not penalized. As before, the attractive violinists (both male and female this time) received higher performance evaluations under the audio-only condition, leading the experimenters to theorize that more attractive musicians receive more encouragement and better training during their formative years, leading to improved performance in the future. To test this theory, an additional study was conducted using child pianists as models.⁷⁷ Using the same methodology and evaluating the same variables, they found that while performers with high ratings in attractiveness, dress, and stage behavior received boosted performance ratings under both the audio-only and audio-visual conditions, the audio-only recordings were rated significantly higher. Looking at the results of the past three Wapnick et al. studies plus an additional one that examined high level pianists taking part in the prestigious Van Cliburn competition, data shows that the audiovisual enhanced performance ratings effect seems to benefit only those musicians that have had extensive training.⁷⁸ Confirming the effect shown in earlier studies, Wapnick et al. hypothesized that the cognitive and social enhancements that more attractive children received may have occurred even earlier than sixth grade. However, out of the three variables examined, stage behavior showed fewer significant results than did either dress or attractiveness.

The final study in the series used highly trained pianists as the models and music students as the evaluators.⁷⁹ They found that once again, audio-visual recordings received higher ratings than audio-only performances. The researchers theorized that

⁷⁷ Wapnick, Kovacs Mazza, and Darrow, "Children's Piano Performances," 323-335.

⁷⁸ Wapnick, Ryan, Lacaille, and Darrow, 7-20.

⁷⁹ Ibid.

listeners might actually be evaluating different things in each case—with audio, they are rating only the playing itself but when visuals are added it is the overall performance that is evaluated. In this study, the performers with higher stage behavior ratings received significantly lower overall scores on their performances. This was true for both the audio-visual and audio-only conditions, although it is noteworthy that the difference between high and low ratings was greater during the audio-only condition. Wapnick et al. suggests that this effect may have arisen because of several factors, including the possibility that performers that produced less physical motion were better able to concentrate on the musical aspect of their performance. Another possible explanation for these anomalous results is that the evaluators may have had unclear directions when asked to rate the performers' stage behavior, and interpreted that as degree of activity and motion rather than appropriateness of the behavior itself. Studies by Juchniewicz show other results, however, finding that performer ratings increase significantly when the level of activity by the performer is also increased.

Juchniewicz conducted his study by using a professional pianist as the model, having him perform a short excerpt three times, using no movement, head and facial movement only, and full body movement.⁸⁰ Unlike most similar research, in this case the performer played along to pre-recorded music, allowing for consistent audio under each visual condition. Participants in the study were asked to rate the performer using the follow variables: dynamics, phrasing, rubato, and overall musical performance. Juchniewicz found that performance ratings across all categories were significantly higher as movement increased. Because this study kept the audio consistent for all participants, these results might have fewer confounding variables than similar research.

⁸⁰ Juchniewicz, 417-427.

He does acknowledge that further research is required using other musical variables and additional performers, as this study does not control for possible gender bias, an effect which was noticeable in the first Wapnick study, and one which has previously shown significant results in ratings of performers on various instruments.⁸¹ It is worth noting that the preceding experiments asked listeners to evaluate the *quality* of the performance but not specifically their *enjoyment* of the performance. Thompson suggests that the emotional engagement of audience members may be a better predictor of their overall enjoyment of the performance as compared to ratings of the quality.⁸²

In a series of experiments designed to determine if evaluator ratings depended on the amount of visual movement exhibited by performers, Davidson used a technique developed by Johansson of attaching reflective ribbons to the clothes of violinists and using video techniques to create a picture where only the reflected points of light could be observed—thus correcting for possible gender and attractiveness bias.⁸³ The performers were directed to play short musical excerpts in the following styles: deadpan, projected (normal performance style), and exaggerated. Davidson found that performance ratings increased for the projected and even more so for the exaggerated manners under all three conditions: audio, visual, and audio-visual. The results also showed that the visual condition produced the highest difference between deadpan and exaggerated ratings, while the audio-only produced the least. A second experiment was conducted as part of the same study, this time using a pianist, and achieving similar results, although in this case the differences between the deadpan and exaggerated ratings

⁸¹ Wapnick, Darrow, Kovacs, and Dalrymple, 474; Elliott, 52-53.

⁸² Thompson, 21.

⁸³ Davidson, "Visual Perception of Performance Manner," 103-113.

were even more pronounced. Davidson concluded that the visual aspect of a performance might be even more helpful than the aural in determining the expressive intentions of a performer. This effect was found to be particularly strong when the evaluators were non-musicians.⁸⁴

The experiment was repeated by Broughton and Stevens who used a marimba player as the model, chosen because the technology of the instrument allows for somewhat limited methods of aural expression, thus enhancing the visual aspect of a performance.⁸⁵ Without explicitly specifying types of performance behaviors to be used, Broughton and Stevens recorded professional marimba players using Davidson's "deadpan" and "projected" stage manners. Performers were both female and male, had repertoire pre-selected by the researchers, and had their faces digitally masked to avoid possible confounds that arose from a similar study.⁸⁶ Participants in the study were asked to rate performances according to the level of perceived expressivity and their level of interest in the performance, slightly different questions than Wapnick, Darrow, Kovacs, and Dalrymple asked.⁸⁷ Broughton and Stevens found that participants rated expressivity in "projected" performances significantly higher than "deadpan" performances under audio-visual conditions, although the two methods were rated similarly under audio-only conditions. The same effect was found on the question of interest level. Unlike in Davidson's study, participants assigned higher ratings to the "deadpan" performances

⁸⁴ Davidson, "What Does the Visual Information Contained in Music," 110-111.

⁸⁵ Broughton and Stevens, 137-153.

⁸⁶ McClaren, 54-58.

⁸⁷ Wapnick, Darrow, Kovacs, and Dalrymple, 473.

under the audio-only condition, leading Broughton and Stevens to suggest that musicians have the ability to manipulate audience perceptions through visual display and body language alone. Although performers in the previous studies were not specifically asked to alter their physical movements based on their expressive intent, Davidson found that the movements were smallest in amplitude during "deadpan" performances and largest in amplitude during "exaggerated" performances.⁸⁸ Clearly there is a visual element to performer expression, even if the performer remains unconscious to it and the movements are flexible and organic between performances.⁸⁹ The study by Broughton and Stevens supports earlier research by McClaren which, also examining the performance of marimba players, determined that "positive" physical movements improved overall performance ratings while "negative" behaviors did not significantly detract from the musical evaluation.⁹⁰ McClaren also reported a significant preference for viewed performances rather than audio-only, as did others.⁹¹

Howard investigated the effects of two specific variables on evaluations of high school vocalists: dress and stage behavior.⁹² Singers recorded excerpts using combinations of "casual" and "formal" dress and stage deportment, as well as audio-only recordings. The evaluator pool was made up of high school, undergraduate, and graduate vocalists and was asked only to rate the performer on overall musical quality. Howard

⁸⁸ Davidson, "Understanding the Expressive Movements," 9-31.

⁸⁹ Davidson, "Qualitative Insights," 395.

⁹⁰ McClaren, 57.

⁹¹ McClaren, 57; Davidson, "Visual Perception of Performance Manner," 109; Ryan, Wapnick, Lacaille, and Darrow, 565.

⁹² Howard, 166-185.

found that significantly higher ratings were assigned to performers wearing formal dress as well as those exhibiting formal stage presence. In contrast to previous research, the overall highest performance ratings were consistently assigned to the audio-only recordings under all conditions.⁹³ Howard acknowledges this contradiction but offers little explanation aside from the possible existence of other extra-musical factors such as performer attractiveness. Griffiths found similar results in a study of the appropriateness of performers' dress.⁹⁴ Four female violinists were videotaped performing (with a dubbed-in master track) in jeans, a short nightclub dress, and a formal concert dress. Evaluators rated the performances in the nightclub dress significantly lower in both technical proficiency and musicality. Griffiths allows that this effect may have been partially because of the restricted freedom of movement the nightclub dress allowed, and the obvious discomfort of the performers who were wearing it. This confirms data from Davidson and Dawson, which showed that pianists who were placed in a restraining harness produced performances that were not considered as musically expressive or visually interesting.⁹⁵

In a study of vibrato in violin and viola players, Gillespie compared ratings of various vibrato characteristics in experienced and inexperienced players using audio-visual and audio-only conditions.⁹⁶ For the inexperienced players, the audio-visual

⁹³ Davidson, "Visual Perception of Performance Manner," 109; Wapnick, Kovaks Mazza, and Darrow, "Violin Performance Evaluation," 514-515; Ryan, Wapnick, Lacaille, and Darrow, 565; Finnäs, 70.

⁹⁴ Griffiths, 159-177.

⁹⁵ Davidson and Dawson, 31.

⁹⁶ Gillespie, 212-220.

condition produced higher ratings for several of the rating criteria (Vibrato width, evenness, and pitch stability) and showed significantly higher ratings for overall sound. The study of experienced players resulted in only significantly higher ratings for pitch stability; all other criteria produced non-significant figures. Given that this research was designed for pedagogic use, the evaluators in this study were all string pedagogy experts. Thompson, Graham, and Russo conducted a study of facial expressions to see if it could affect an audience members' perception of musical dissonance.⁹⁷ Using recorded video and audio of blues musician B.B. King, they found that performances were rated as considerably more dissonant when they were accompanied by a "dissonant-appearing" facial expression. The difference between ratings of dissonant and neutral performances was significantly higher for the audiovisual condition than the audio-only condition. In similar experiments, Thompson et al. also determined that varying facial expressions could affect perception of the size of melodic intervals and whether or not a musical passage sounded joyful.

The major disconnect between the pedagogical and empirical literature related to stage presence in musicians is that the pedagogical accounts generally explain very specific physical behaviors (e.g. eye contact, bowing, and smiling) while the statistical research often focus on broader concepts (e.g. degree of movement, tension). Researchers have found a noted preference in evaluators for visual performance as compared to audio-only. They typically prefer those performances where the musician shows more physical movement, but not those where there is obvious tension. Little research has been done to this point for many of the factors listed by pedagogues: entrance to the stage, bowing, eye contact, matching physical movements to musical

⁹⁷ Thompson, Graham, and Russo, 203-227.

expression, and negative reactions to mistakes. The remainder of this paper will endeavor to reconcile the experiential ideas of Hagberg, Koronka, and other performers and educators with the empirical work of Wapnick, Davidson, Juchniewicz, and others by examining specific performance behaviors in instrumental performers and their effect on the overall perception of performance quality. In addition, these factors will be examined to determine if their variation shows an effect on the overall performance experience. While many of the experiential accounts focus on the same major components of stage presence, an important first step will be to determine whether these are primary considerations of contemporary pedagogues and isolate the factors to hypothesize which have the strongest influence on performance perception. These factors will then be tested through recorded audio and audiovisual performance and evaluated to determine their effects.

Chapter 2

Study 1: Physical Behaviors Survey

Before beginning an experiment to explore how various physical behaviors can affect the overall perception of a musical performance, it is necessary to determine which behaviors might be factors. Literature directly relating to that subject does exist, but tends to be rather sporadically located in pedagogy books for various instruments and often is only given a cursory look. Considering that performance pedagogy is by nature a subjective field, it stands to reason that a reliable method of developing quantifiable data is by aggregating the opinions of various experts. Thus, I undertook a preliminary survey of qualified music educators to determine which physical behaviors were considered the biggest contributing factors to a musicians' "stage presence."

This survey had the added benefit of helping to develop a clear picture of contemporary ideas about body language in performers—college music educators tend to be performers as well as educators and can speak from experience on both sides of the "glass barrier" that separates performer from audience. In addition, their opinions will provide another set of hypotheses to test, enabling some informed data on whether the most commonly taught performance behaviors actually hold up to scrutiny by an unsuspecting audience.

Materials and Methods

112 subjects participated in the first study, a survey of physical behaviors that might contribute to a positive or negative perception of body language while performing.

However, only 78 respondents correctly followed the survey directions and only those answers were counted in the statistical portion. The open-ended responses to several questions were included in the resulting data regardless of whether or not the subject correctly marked only five responses to the questions about positive or negative behaviors. All subjects were instrumental faculty members from colleges and universities accredited by the National Association of Schools of Music and provided informed consent. 57 were male, 19 female, and 2 chose not to disclose gender. They ranged in age from 25 to 75, with the median age of 47 (and a mean of 45 years of teaching experience). 33 of the subjects played brass instruments, 29 played woodwind instruments, 12 were string players, and 2 were percussionists.

Subjects were recruited through the web sites of randomly selected college music departments and contacted by email. In order to get a diverse cross-section of responses, the schools chosen were from all fifty states and included large public universities, small liberal arts colleges, and conservatories. Only those faculty members that played standard orchestral instruments were recruited (to avoid possible skewing of results, the most notable omissions were pianists and string bassists because the large size of their instrument obscures an audience member's view of their body, and vocalists as this eliminates many instrument-related variables). In addition, only those teachers who were primarily specialists in Western art music were contacted. The set of standard performance behaviors differs greatly between genres (consider the numerous behaviors that are permissible, even encouraged in jazz, popular music, and music from non-Western cultures that would be impermissible during, for example, a piano recital of Beethoven and Brahms). In order to avoid experimental bias through exceedingly broad

survey samples, this study (as well as the subsequent one described in Chapter 3) focuses only on the recital tradition of Western art music, in part because it is a genre that can be performed with only solo musicians, thus eliminating behaviors between group members as confounding variables. Faculty members that chose to participate in the study completed a short online survey using SurveyMonkey. Each subject was asked to rank the five physical behaviors that they considered most impactful on a positively perceived performance and a negatively perceived performance. They could choose from a list of possible behaviors or input their own. The list of physical behaviors was generated from a review of four decades of literature on performance practice, summaries of which can be found in Chapter 1. At the completion of the survey, each subject was asked about their own position toward teaching body language and stage presence to students.

Survey responses to the positive and negative behaviors were scored by assigning 5 points to the behavior contributing “most importantly,” 4 points for the one chosen as “second most importantly,” continuing to 1 point for the behavior selected as “fifth most importantly.” Points were totaled to find the five most important behaviors for both positive and negative performances. The survey instrument used can be seen in Appendix 1.

Results

For behaviors that contributed to positively perceived performances, the most commonly chosen by subjects was “Smooth, relaxed physical movements.” 63 subjects (81%) thought that this behavior was important to some degree, with 18 (23%) considering it the most important factor. Other behaviors that were often selected

include, in descending order of total points scored, “Body language and facial expressions match the character of the music” (48 subjects – 62% considered important, 20 – 26% considered most important), “Smiling before performance” (50 subjects – 64% considered important, 8 – 10% considered most important), “Smiling after performance” (58 subjects – 74% considered important, 3 – 4% considered most important), “Eye contact with audience” (43 subjects – 55% considered important, 13 – 17% considered most important), and “Brisk, confident entrance to the stage” (49 subjects – 63% considered important, 8 – 10% considered most important). Factors that were not considered strong contributors to a positively perceived performance include “Straight, tall posture,” “Smooth, deep bow,” and “Shoulder width stance with feet flat on the floor.”

For behaviors that contributed to negatively perceived performances, by far the most commonly chosen by subjects was “Visible reaction to mistakes.” 73 subjects (94%) thought that this behavior was important to some degree, with 45 (58%) considering it the most important factor. Other behaviors that were commonly selected include, in descending order of total points scored, “Frown or angry look (52 subjects – 67% considered important, 9 – 12% considered most important), “Physical movements out of character with the music” (46 subjects – 59% considered important, 5 – 6% considered most important), “Body or face obscured by music stand” (44 subjects – 57% considered important, 2 – 3% considered most important), and “Visible tension in arms or shoulders” (41 subjects – 53% considered important, 8 – 10% considered most important). Factors that were not considered strong contributors to a negatively

perceived performance include "Lack of physical movement," "Excessive swaying or instrument motion," "Stiff bow," "Adjusting or cleaning instrument," or "Tapping foot."

Fourteen respondents added additional positive contributing behaviors. Some of the additional items mentioned include: "being unaware of audience," "convincing and inspired performance," "good controlled breath before playing or performing," "brisk and smooth exit from the stage," "amount of time taken before the performance to tune, etc.," and "speaking to the audience." One subject responded with, "I don't think any of these contribute... have you considered the more obvious things like, preparation, breathing, repetition of the experience." These extra responses were not counted statistically because they were either generally dissimilar from the given numbered responses or were submitted by subjects who did not follow survey directions. There were an additional twelve subjects who added additional responses to negatively perceived behaviors. Some of these responses included: "fidgeting," "verbal negative commentary from performer while playing," "poor breath before playing," and "walk onstage looks nervous." Two respondents mentioned not acknowledging an accompanist or other collaborating musicians and three talked about not having a "connection to the audience." This last factor was discounted in the video study because it would be more difficult than the others to break down into a specific set of physical behaviors.

Of the 112 total respondents to the survey, only three said that they did not discuss body language and stage presence with their students. Just over half (64) rated stage presence to be a "very important" component in performance. There were a large variety of responses to the question, "What do you emphasize about stage presence and body language in your teaching?" However, a number of words showed up numerous

times, such as "relax" or "relaxation" which appeared in 25 responses. An additional 23 participants talked about being "confident" or showing "confidence" and twelve mentioned "ease of movement" or "natural movement." Nineteen respondents included the word "audience" somewhere in their answer, in the context of being aware or communicating with those listening to the performance. Appendix 2 contains the survey responses for the questions on positive and negative behaviors, as well as the complete responses for the question regarding which elements of stage presence and body language the respondents taught to their students.

Discussion

The survey indicated that the strongest contributing factor to either positively or negatively perceived performances was the performer visibly reacting to mistakes, confirming numerous earlier pedagogical accounts.¹ Another important set of factors involved the performer reducing physical tension, which could appear in the face as an angry look, or manifest in arms, shoulders, or other places on the body. In addition to being visible even to an untrained audience, tension-based performing can often be identified within the music itself, becoming a negative behavior for aural performance as well as viewed or live.² The final major category of behaviors which showed significant survey results for both positive and negatively perceived performances involved matching physical movements to the character of the music. This has the effect of either drawing in audience members to the performance and allowing them additional stimuli

¹ Schneiderman, 80-81; Scharnberg, 46; Robbins, 33; Hagberg, 36.

² Gellrich, 176-177.

with which to connect with the music, or by showing inconsistency in the visual and aural experience, detract from it.³ In general, the results of the Physical Behaviors Survey (PBS) support existing literature on the subject of stage behavior and body language, and will be used to develop the methodology for the next phase of this project.

Interestingly, many of the open-ended survey questions resulted in answers that are difficult to break down, quantify, or teach. Concepts like "confidence" are easily identified and understood, both by musicians and audience members, but are far harder to actually teach. The same goes for "ease of movement" and "communication with audience." Expecting many of these ambiguous types of responses, the empirical part of the survey was designed to generally include concepts that are more concretely understood. It is worth noting that while making the video recordings of performers following either positive or negative behaviors, even those factors which seemed extremely straightforward and easily manipulated proved to be more difficult than anticipated to reliably produce on recording. This could carry over to an even greater degree in live performance, where audience members farther from the performer have difficulty seeing the small and subtle movements that can seem so important while practicing.

³ McClaren, 55; Scharnberg, 46; Robbins, 33.

Chapter 3

Study 2: Performance Evaluation Questionnaire

This study is an attempt to empirically determine which physical behaviors affect an audience member's perception of a performance. The list of behaviors chosen was developed from the Physical Behaviors Survey (PBS, see Chapter 2) and a review of relevant pedagogical literature, particularly those behaviors that were appropriate to be used as an experimental variable. Four separate performers on different instruments were video recorded playing a short musical excerpt. They were instructed to exhibit a wide variety of physical behaviors with both negative and positive attributes based upon the PBS. The performers in each video clip were instructed to focus upon one "negative" and one "positive" behavior. For the experimental groups, these video clips were shown to a variety of university students taking classes in music appreciation. The control groups listened only to audio versions of the same performances. Each student then rated the performances according to his or her perception of the overall quality and how likely he or she would be to attend a full recital or concert by that performer.

Materials and Methods

Videotaping of the four students took place on February 26, 2011 on the campus of Indiana University (IU). Each student was studying music performance at the IU Jacobs School of Music. The performers played trumpet, trombone, clarinet, and violin respectively, with the aim of representing the widest variety of instrument types. Larger instruments such as cello, tuba, piano, string bass, and percussion that often obscure the

view of the body or face and prohibit the excessive body movement that is common to small instruments were not chosen for this study. For similar reasons, vocalists were not used for this procedure as that would eliminate any instrument-related variables. Two of the performers were undergraduate majors and two were graduate students. Additionally, two were male and two were female. Each student was asked to prepare a short (30-60 second) clip of music from his or her repertoire and to dress in all black clothing. Unlike some similar experiments, the goal of this study was to minimize as much as possible the effect of clothing on audience members.¹

Taping took place in a classroom in the School of Music set to look like a performance hall with a curtain drawn across the back of the room. The only object present in the scene besides the performers was a music stand. Performers were asked to walk on to the set, bow in certain cases, perform their musical selection, bow again, and walk out. Each performer was recorded between nine and twelve times over the course of an hour, modifying their physical behaviors in different ways, in accordance with the results of the PBS. The taping was done in high definition by the experimenter using a Canon handheld video recorder with a Sony external microphone and additional high quality audio was recorded using a Zoom H2 handheld recorder. A one-camera setup was chosen in order to most effectively simulate the conditions of a typical live performance, where each audience member would only be able to view the performers from one angle and would not be at liberty to change viewing positions during the course of the performance. In this study, the word *audience* will be used to describe the survey participants listening to audio and viewing video clips. Each of the performers had been

¹ Wapnick, Kovacs Mazza, and Darrow, "Children's Piano Performances," 323-335; Wapnick, Kovacs Mazza, and Darrow, "Violin Performance Evaluation," 510-521.

well trained on stage presence and already exhibited many of the behaviors identified as contributing to a positive performance in the Physical Behaviors Survey. For their positive performance video clip, they were instructed to perform as they typically do during a live performance. Thus, the majority of the taping was focused on having the performers exhibit a range of negatively perceived behaviors as determined by the PBS. During the taping, several of the performers commented that these instructions often ran contrary to their musical training and proved to be difficult to execute. Table 1 summarizes performer characteristics and the negatively perceived behaviors that they were instructed to demonstrate:

Table 1: Performer Characteristics

	Performer 1	Performer 2	Performer 3	Performer 4
Gender	Female	Male	Female	Male
Year in School	Graduate	Undergraduate	Graduate	Undergraduate
Instrument	Clarinet	Trumpet	Trombone	Violin
Musical Selection	J.S. Bach: <i>Cello Suite</i> , "Courant"	Carl Höhne: <i>Slavonic Fantasy</i>	Joseph Jongen: <i>Aria and Polonaise</i>	J.S. Bach: <i>Partita No. 3</i> , "Courant"
Negative behaviors displayed	No bow, stand obscuring view of body, excessive motion, showing mistakes	No bow, excessive motion, tension, "nervous" look, angry posture, stand obscuring view of body	No bow, bell obscuring face, excessive motion, no motion, distraction and showing mistakes, tension	No music stand, stand obscuring view of body, excessive motion, smiling constantly, angry posture, showing mistakes, tension, no vibrato

Performer 1 performed a movement from a Bach Cello Suite on clarinet. After recording her selection once using positive performance behaviors, including smiling and

bowing to the audience before and after the performance, she recorded again with no audience acknowledgement on her part. In response to some of the open-ended feedback left on the Physical Behaviors Survey, Performer 1 recorded another take with the music stand almost completely obscuring the view of her face. Performer 1's inclination was not to move around a great deal while playing, and thus in the negative performance video clip she was instructed to try moving excessively, out of character with the musical content of her selection. This seemed to be difficult for her to do, and even these takes did not show a great deal of instrument and body movement, particularly considering the range of motion possible using an instrument such as the clarinet. The last few takes were attempts to get Performer 1 to react in some visible way to her mistakes. The experimenter tried distracting her several times to force a reaction by standing up and waving upon hearing a mistake. This resulted in a slight reaction but was only generally effective the first time it was done.

Performer 2 performed Carl Höhne's *Slavonic Fantasy* on trumpet. He was an extremely consistent performer and tended towards less body movement and physical expression than any of the other performers. Thus, it was often difficult to get Performer 2 to use excessive motion or show contradictory emotions in more than a very subtle manner. After recording several takes using positive physical behaviors, he recorded once with no bow or audience acknowledgement. For the next several takes, Performer 2 was asked to use excessive instrument and body motion, and although he felt that he was moving around quite a bit, the effect on camera was somewhat understated. On the next takes, he was asked to perform while showing several different emotions and mental states, including nervousness, anger, and tension. Of these, the angry posture resulted in

the most exaggerated performance. For a final take, he recorded with the music stand set up extremely high and obscuring the view from the camera so that an audience member could only see his eyes and the top of his head.

Performer 3 performed on trombone an excerpt from Joseph Jongen's *Aria and Polonaise*. She first recorded several times following the list of positively contributing behaviors. The posture that she took had her body turned slightly to the left with the large bell of the instrument off to the side and not blocking the view of her face and head. For the third take, she turned slightly to face in the opposite direction which allowed the bell to directly obscure her face from an audience member's view. All other attributes remained the same as in her prior takes. She then recorded several more takes using excessive instrument motion putting it completely out of character with the music. This created some awkwardness and distraction, resulting in her playing with a few mistakes that elicited some subtle visual reactions. In contrast to her early attempts when she showed extreme focus, Performer 3's eyes would occasionally glance over in the direction of the camera ("audience"), particularly after making mistakes (this was something that she was encouraged to let happen during these particular takes). Having such a large instrument made it very easy to see slight changes in posture and body movement as the bell and slide of the trombone tended to move first and more dramatically than the other instruments in the study. The last several takes were done with a deliberate effort to appear tense and nervous, so they were recorded with no bow or smile and with the slide of the instrument moving rigidly.

Performer 4 played part of the "Courant" movement from J.S. Bach's *Partita No. 3 in D minor* on violin. Unlike the other performers, he had his solo memorized, which

allowed for a much wider array of taping possibilities and potential physical behaviors. Performer 4 recorded three takes showing positive attributes: one from memory, one with a music stand in normal performing position allowing a view of his face and instrument, and one with the stand blocking most of the view. He typically performed with more body and instrument motion than did the other performers, so in addition to recording the standard example of excessive motion, he also recorded one take with almost no motion at all. In talking with him after the taping session, it was noted that this was almost as difficult for him to do as it was for Performer 2 to perform with a great deal of motion. Performer 4's next few takes displayed a range of different emotions: happy and smiling the entire time, angry, and distracted. During the distracted takes, he glanced up at the camera periodically, most notably after mistakes (which were more numerous during these takes). He also recorded once with a great deal of tension. This also was extremely obvious on camera and resulted in very different aural and musical results. Finally, at his suggestion, he recorded one take using no vibrato at all, resulting in a very stiff-looking physical presence. At one point in Performer 4's later takes, there was some audio bleed from a percussion ensemble rehearsing in a nearby room. This was mostly removed through equalization in post-production, and was removed identically in the audio-only track used for the control recording.

After all the videos were recorded, they were screened by the experimenter (in consultation with the performers) to determine which clips best functioned as the most clear and obvious examples of positive and negative physical behaviors for each performer. As each had different physical movements that they felt more or less comfortable with, the choices of behaviors (particularly for their "negative"

performances) tended to be somewhat different between the four resulting in performance factor variability that was statistically tested. Table 2 indicates which positive and negative performances were chosen for each performer:

Table 2: Chosen Positive and Negative Behaviors for Each Performer

	Positive Behavior Clip	Negative Behavior Clip
Performer 1	No bow, little instrument movement	Excessive instrument movement
Performer 2	Relaxed posture	Music stand obscuring view of face and body
Performer 3	Relaxed posture and movement matches character of the music	Tension and distraction, small reactions to mistakes
Performer 4	Memorized performance, movement matches character of the music	Memorized performance, using excessive body tension

Performer 1's chosen positive performance came on her third take, where she did not bow or otherwise acknowledge the audience. On this take, she was trying to perform without using excessive instrument motion which would be out of character with the music. Performer 1's negative performance was from her sixth take, where she attempted to use excessive instrument motion. Initially, the experimenter believed from the perspective of the audience that this take actually looked more natural and comfortable than her chosen positive take, but it was decided to go with the wishes of Performer 1 in order to maintain consistency between the different performers. There was one loud squeak from the clarinet in the recording, which was eliminated in post-production to avoid distracting the audience (and identically eliminated in the audio-only recording used for the control group). The majority of Performer 2's performances looked very similar, even when he was trying to display various emotions that did not match the

character of the music. The selection for the positive performance came on his first take, and because of his visual consistency, the chosen negative performance was the eleventh, when the music stand was placed in a way to almost completely obscure the view of the performer from the audience. Performer 3's positive performance came on her second take where she was trying to show positive behaviors. Her negative take was on the eighth take where she was asked to allow herself to react to mistakes. She looked distracted throughout, and there were several times where she glanced up at the audience following an error, particularly when the experimenter stood up and waved his arms at the same time. There were a variety of interesting possibilities to look at from Performer 4's performances, including the test of whether or not performing from memory affects perception of a performance. The two chosen performances ended up being both from memory, allowing for the possibility of comparing the difference in reactions between audio-only and audio-video evaluations in his versus the other performances that used music and music stands. The positive performance was his first take, where he was trying to use positive physical behaviors. The negative performance was from the eleventh take, where the instructions were to play with extreme body tension. This was extremely easy to see on video, both because of the clear sight lines from not having a music stand in the way and the arm and hand motion necessary to play the violin.

In post-production, each clip was edited so that it began when the performer walked on stage and ended when he or she walked off. The audio tracks from the higher quality recorder and microphone were combined with the corresponding video using Adobe Soundbooth CS5 and Adobe Premier Pro CS5. Each video clip had an identical audio-only recording created in mp3 format. Four different recordings were then created

using different clips in different orders. Each recording included one clip from each performer, using either the "positive" clip or the "negative" (as shown in Table 2). Individual recordings used two positive and two negative clips so that each of the eight chosen clips appeared on two separate recordings. Both the selection of clips and the order on the recordings were done randomly. In addition, two audio-only recordings were made, using the same procedures for clip selection and randomization. In this case, each of the eight clips only appeared once. Each recording lasted approximately seven minutes and thirty seconds. Two anomalies in the audio were removed digitally in both the video and audio recordings to avoid distracting listeners. Each player on the recording was identified by number ("Performer 1", "Performer 2", etc.) and audience members were given fifteen seconds between clips to answer survey questions. The 15-second interval was deemed to be a sufficient amount of time for the audience to immediately react to the recordings.

Students in seven different classes were used to evaluate the videos. All of the students were taking the course "Enjoyment of Music" at the University of Louisiana-Monroe (ULM). This alternate location was chosen to avoid any bias that might arise from student evaluators knowing any of the recorded performers. The students in this class (which is one of three possible Fine Arts electives taken to satisfy a ULM core requirement) were undergraduate non-music majors studying the history and performance of various types of music, focusing particularly on Western Classical. There were seven separate face-to-face sections of the course taught during the Spring 2011 semester and each section participated in the survey. All students provided informed consent prior to participating and confirmed that they were over eighteen years of age. Students in each

section either watched one of the four randomly assigned videos or one of the two audio-only recordings. The two smallest sections (with considerably fewer students than the largest) both listened to the same audio recording to achieve a large enough sample size ($n = 21$). After viewing the clip of each performer, they were instructed to rate what they saw and heard on the following two questions:

- 1) On a scale from 1 (poor) to 9 (excellent), how would you rate the overall quality of this performance?
- 2) On a scale from 1 (least likely) to 9 (most likely), how likely would you be to attend a complete recital or concert by this performer?

On the back of the survey, each student answered demographic questions about their gender, age, major in school, whether they played an instrument and for how many years, and how many years they took private lessons on that instrument. Each completed survey was given a randomly assigned identification number before beginning analysis. The full survey (Performance Evaluation Questionnaire) is available in Appendix 3.

Results

A total of 129 students participated in the survey. Fifty-five percent were female, and the average age of the students was 22 ($R = 18 - 65$ years). Of these students, 46 (35.7%) reported that they played a musical instrument. Fourteen listed piano as their primary instrument, ten played guitar, twelve played woodwinds, five on brass, three were percussionists, two played bass guitar, and one was a violinist. These students had played their primary instruments for an average of 6.76 years ($R = 1 - 17$ years). In addition, 24 respondents (52% of the musicians) had taken at least one year of private lessons, with an average of just under 2 years ($R = 1 - 10$ years). Primary instrument

distributions according to gender were as follows: the vast majority of the guitar, bass guitar, percussion, saxophone, and brass players were male and the clarinet, flute, and piano players were mainly female. Interestingly, no students claimed voice as their primary instrument, but this could almost entirely explained by the tendency of non-musicians to not consider the human voice an "instrument." Using the Enjoyment of Music course, a core curriculum requirement for every ULM undergraduate degree, meant that the survey participants represented a wide range of majors and programs (33 in total). Of these, 52 (40.3%) were studying in the medical field (including pharmacy, nursing, occupational therapy, and radiologic technology), 34 (26.4%) were located in the College of Arts and Sciences (including general studies, arts, and history), 26 (20.2%) were located in the College of Business (including accounting, finance, aviation, and criminal justice), 9 (7%) were located in the College of Education (including psychology and kinesiology), and 7 (5.4%) had not declared a major.

Research Question 1. The first research question addressed was whether there was a statistical difference in scores between the audio-only and audio-video versions of the same clip. Independent sample t-tests were run comparing the scores of the audio and video versions of the same performance. In addition, correlations were run to determine effect size. For the question on overall quality of performance, six out of the eight clips showed a preference for the audio-visual performance as compared to the audio-only, with four being statistically significant. All four of the clips that focused on positively perceived body language were included in this category. The first exception to this result was the negatively perceived clip from Performer 1, in which the audio was preferred to the video by a score on the nine-point scale of 7.29 to 6.76 ($p=.124$, $r=.198$).

This performer was attempting to move excessively and out of character with the music during her clip. The more significant result came from the negative clip of Performer 2, whose audio performance was more highly rated than the video performance by a score of 7.43 to 6.57 ($p=.076$, $r=.251$). This was the clip in which he had a music stand placed in a way that the audience could not see his face at all. Both of these clips approached significant results and might have achieved them with a larger sample size. The two clips that exhibited negative behaviors that did not show a preference to the audio-only version were with Performer 3 and 4, who demonstrated distraction and tension in their playing.

Table 3: Scores for Quality Question (Audio vs. Video)

	Audio-only means	Audio-video means	p	r (effect size)
Performer 1 Positive	6.32 ($SD=1.157$)	7.35 ($SD=1.263$)	.003	.359
Performer 1 Negative	7.29 ($SD=.956$)	6.76 ($SD=1.714$)	.124	.198
Performer 2 Positive	6.26 ($SD=1.327$)	7.10 ($SD=1.470$)	.030	.246
Performer 2 Negative	7.43 ($SD=1.248$)	6.57 ($SD=1.906$)	.076	.251
Performer 3 Positive	5.62 ($SD=1.658$)	5.63 ($SD=1.629$)	.976	.004
Performer 3 Negative	4.58 ($SD=1.575$)	5.78 ($SD=1.682$)	.008	.300
Performer 4 Positive	6.53 ($SD=1.679$)	6.92 ($SD=1.808$)	.420	.100
Performer 4 Negative	5.48 ($SD=2.136$)	7.63 ($SD=1.337$)	.000	.622

The results were similar for the survey questions addressing how likely participants would be to attend a recital or concert by the performer they watched or heard. Again, the same six clips showed a distinct preference for video recorded performances, with a slightly higher level of significance and higher effect (See Table 4).

The same two clips displaying negative behaviors from Performers 1 and 2 showed lower ratings from the visual performance, although in this case neither result was significant. The difference in ratings between audio and video performances were considerably larger for this survey question, suggesting that an audience member's likelihood of attending a performance is influenced far more by whether he or she can see the performer than his or her impression of the quality of that player. Another interesting note from the results was that in each case, the average quality score for each individual performer was higher than the likelihood of attendance score. One final item of importance was that the approximate scores for Performer 4 were generally higher than the other three. Although comparisons were not done between performers because of their differences in gender, appearance, musical instrument, and selection performed, it is worth noting once more that Performer 4 was the only one to have performed his musical excerpt from memory.

Table 4: Scores for Attendance Question (Audio vs. Video)

	Audio-only means	Audio-video means	<i>p</i>	<i>r</i> (effect size)
Performer 1 Positive	3.63 (<i>SD</i> =1.640)	6.44 (<i>SD</i> =2.052)	.000	.551
Performer 1 Negative	6.05 (<i>SD</i> =1.596)	5.12 (<i>SD</i> =2.472)	.080	.230
Performer 2 Positive	3.74 (<i>SD</i> =1.968)	5.98 (<i>SD</i> =2.278)	.000	.405
Performer 2 Negative	5.43 (<i>SD</i> =2.461)	5.33 (<i>SD</i> =2.412)	.891	.020
Performer 3 Positive	3.81 (<i>SD</i> =2.015)	4.27 (<i>SD</i> =2.132)	.445	.110
Performer 3 Negative	2.42 (<i>SD</i> =1.502)	4.17 (<i>SD</i> =2.198)	.002	.347
Performer 4 Positive	4.63 (<i>SD</i> =2.338)	6.19 (<i>SD</i> =2.294)	.015	.295
Performer 4 Negative	3.76 (<i>SD</i> =2.071)	6.63 (<i>SD</i> =2.211)	.000	.538

Research Question 2. The second research question to be addressed was whether there were statistically significant differences between the recordings/video clips displaying positive and negative physical behaviors. The purpose of this question is to determine if the perceived differences in the performances are due to musical (aural) differences or based on visual stimuli. Independent sample t-tests were run comparing the positive and negative behavior version of each audio and video clip. Looking first at the question of musical quality, it is immediately clear that there is no consensus among the survey participants who listened only to audio recordings on whether they prefer the positive or negative performances of each performer. The preferred performance averaged .78 higher on the nine-point scale and three of the four results were statistically significant. Of particular note is that the survey participants preferred Performer 2's negative clip to his positive clip by the largest margin of all the performers ($p=.007$, $r=.421$). There was also no consensus among the participants who watched the video clips, although the only significant preference was shown to Performer 4's negative video clip ($p=.035$, $r=.226$). For each of the four performers, the clip that was preferred by the survey participants who listened only to audio was *not* the same clip that was preferred by those that watched the video.

Table 5: Scores for Quality Question (Positive vs. Negative)

	Positive clip means	Negative clip means	p	r (effect size)
Performer 1 Audio	6.32 ($SD=1.157$)	7.29 ($SD=.956$)	.006	.426
Performer 1 Video	7.35 ($SD=1.263$)	6.76 ($SD=1.714$)	.062	.199

Performer 2 Audio	6.26 (<i>SD</i> =1.327)	7.43 (<i>SD</i> =1.248)	.007	.421
Performer 2 Video	7.10 (<i>SD</i> =1.470)	6.57 (<i>SD</i> =1.906)	.147	.155
Performer 3 Audio	5.62 (<i>SD</i> =1.658)	4.58 (<i>SD</i> =1.575)	.049	.313
Performer 3 Video	5.63 (<i>SD</i> =1.629)	5.78 (<i>SD</i> =1.682)	.696	.042
Performer 4 Audio	6.53 (<i>SD</i> =1.679)	5.48 (<i>SD</i> =2.136)	.094	.268
Performer 4 Video	6.92 (<i>SD</i> =1.808)	7.63 (<i>SD</i> =1.337)	.035	.226

This pattern held when looking at the survey question on likelihood of attendance (See Table 6). The participants who only listened to audio recordings preferred the same two positive clips, for Performers 3 and 4, with Performer 3 showing a significant preference ($p=.019$, $r=.369$). For the survey takers who watched video, they preferred the positive clip of three out of the four performers, although in only one case were the results statistically significant (Performer 1, $p=.007$, $r=.282$). For this question as well, three out of the four preferred audio clips turned out to not be the preferred video (and the fourth was statistically inconclusive).

Table 6: Scores for Attendance Question (Positive vs. Negative)

	Positive clip means	Negative clip means	<i>p</i>	<i>r</i> (effect size)
Performer 1 Audio	3.63 (<i>SD</i> =1.640)	6.05 (<i>SD</i> =1.596)	.000	.609
Performer 1 Video	6.44 (<i>SD</i> =2.052)	5.12 (<i>SD</i> =2.472)	.007	.282
Performer 2 Audio	3.74 (<i>SD</i> =1.968)	5.43 (<i>SD</i> =2.461)	.022	.361
Performer 2 Video	5.98 (<i>SD</i> =2.278)	5.33 (<i>SD</i> =2.412)	.216	.133
Performer 3 Audio	3.81 (<i>SD</i> =2.015)	2.42 (<i>SD</i> =1.502)	.019	.369

Performer 3 Video	4.27 (<i>SD</i> =2.132)	4.17 (<i>SD</i> =2.198)	.843	.021
Performer 4 Audio	4.63 (<i>SD</i> =2.338)	3.76 (<i>SD</i> =2.071)	.220	.198
Performer 4 Video	6.19 (<i>SD</i> =2.294)	6.63 (<i>SD</i> =2.211)	.354	.099

Research Question 3. The final experimental question was whether the effects shown above would change if the survey taker had experience playing a musical instrument. Before attempting to run a multiple regression analysis to determine if any differences arose between the musicians' perception of positive and negative performances, an analysis was conducted to find out if there was any correlation between ratings and the number of years a participant has played a musical instrument. The resulting correlations were generally low, with none showing more than a small effect size (see Table 7). In general, the strongest correlations came on the question of likelihood of attendance, with the participants with the most years playing a musical instrument actually being slightly *less* likely to attend a concert or recital by the performers. These results are not necessarily indicative of a larger trend considering the sample size and demographics of the pool of evaluators, and possible explanations can be found in Chapter 4: Discussion of Results. The other factors looked at had almost no statistical significance, and were discounted. Because of these initial results, it was decided to forgo the multiple regression analysis and postpone this research question for a future study with a larger and more diverse sample size.

Table 7: Correlations with "Number of Years Playing a Musical Instrument"

	"Quality" Question	"Attendance" Question
All video and audio	$r = -.021, p = .641$	$r = -.156, p = .000$
Audio recordings only	$r = .096, p = .226$	$r = -.097, p = .223$
Videos only	$r = -.064, p = .226$	$r = -.168, p = .001$
Positive audio/video only	$r = .005, p = .931$	$r = -.210, p = .001$
Negative audio/video only	$r = -.026, p = .676$	$r = -.108, p = .087$
Positive video only	$r = -.051, p = .489$	$r = -.200, p = .006$
Negative video only	$r = -.063, p = .416$	$r = -.126, p = .100$

Chapter 4

Discussion of Results

The initial hypothesis of this research was to determine whether or not there was a link between the visual aspect of live musical performance and the reaction of audience members to that performance. For this particular question, the results showed that the hypothesis was valid. A second question involved determining which specific physical (visual) behaviors on the part of the performer contributed in a positive or negative way to audience reactions to performance. Here, the experimental results were far more inconclusive, and although they did not show a clear and direct causal link between performance ratings and specific physical behaviors, it was possible to reach a number of conclusions about performance behavior and audience response. An additional goal of the project was to determine what, if any, effect this research could have on current pedagogical practice as it relates to stage presence and body language. Several pedagogical ideas based upon these research findings are explained in this chapter, and others will form the backbone for future research.

The clearest conclusion that can be reached from the study results is that, barring extreme and obvious negative physical behaviors, audience members react more favorably to performances that they can see than those to which they merely listen. In each case, the clips showing positive physical behaviors scored higher both in quality and likelihood of future attendance than the corresponding audio-only recordings. That this result shows up through the genre of classical music, a genre in which the performers have traditionally prided themselves on subordinating visual stimuli in favor of the music

itself could be a sign of either warning or optimism for those critics who claim that the art form is steadily losing market share to more popular forms of entertainment. While this particular study focused on solo performance, it seems likely that the same effect would show up in ensembles as well. This is especially applicable in the case of the symphony orchestra, where members dress identically and move together in an effort to not distract from the aural experience. (Ironically, this is not unlike a marching band, although the desired visual effect there is to enhance the enjoyment of the performance instead of allowing it to fade into the background). These results in favor of visual (possibly equating to live) performance over audio-only appear even more strongly for the survey question about likelihood to attend future events—three of the four positive performances clearly showed significantly higher scores and larger effect sizes than did the corresponding audio. These results confirm earlier research on the effect of viewed performances by McClaren, Gillespie, and Wapnick et al.¹

The most interesting application of this effect of visual enhancement comes from the situation in which the visuals were deliberately unappealing. Performer 2, who performed his selection with a music stand strategically placed to almost completely hide his face and body from the perspective of the audience had somewhat lower quality scores for his video recorded performance than for the audio alone. These results approached significance and likely would have been significant with a larger sample size, confirming research by Williamon.² Certainly this was the most exaggerated negative physical behavior examined during the study, and the one most immediately obvious to an untrained audience member. This result highlights the importance of allowing a

¹ McClaren, 56-57; Gillespie, 216; Wapnick, Mazza, and Darrow, "Effects of Performer Attractiveness, Stage Behavior, and Dress on Violin Performance Evaluation," 514-515.

² Williamon, 91-92.

performer to be accessible by showing his or her face to the audience. When this personification was denied, audience members reacted even more negatively than to performances that they considered to be of poorer musical quality. It is particularly interesting that, even for Performer 2's negative performance, audience members were not significantly less likely to want to attend a future performance. Even despite obviously poor stage presence (that the audience members did notice and react to in their quality scores), the effect of any amount of visual stimuli during the performance prevailed. This result could be especially important to those musicians who play large instruments which naturally obscure the body, particularly tuba, double bass, or percussion. These players may be well served by positioning themselves in such a way that their audience has the maximum possible view of the performer.

The other musician for whom this reverse effect showed up was Performer 1. She tended to be quite still while performing and expressed to the experimenter that being asked to use excessive body and instrument movement made her uncomfortable (indeed, resulting in a few more mistakes during performance on her "negative" clip). Her discomfort was likely picked up by the audience members, who rated her video recorded performance lower than the audio-only recordings on both the question of performance quality and likelihood of future attendance. Neither of those two results were statistically significant, but again, they approached significance and it is likely they would have been so with a larger pool of audience members. This result is especially striking considering the reaction of the experimenter to her performances. When viewing the recordings in preparation for choosing negative and positive clips to use in the study, I was more inclined to select Performer 1's performance when she moved excessively as the *positive*

example. To me, this looked more natural and more characteristic of what I typically expect to see from clarinet soloists. Clearly, neither Performer 1 nor the pool of audience members agreed with me. While this is a low sample size from which to make generalizations, there is the possibility of "musician bias"—the idea that trained musicians look for different aspects of performance to focus in on than do untrained audience members. Along the lines of Davidson's findings that non-musicians are more strongly influenced by visual stimuli than experienced musicians, there is likely a corresponding effect in the evaluation of performances.³ Future research in this vein would be useful in determining the significance of this effect—perhaps by repeating the study with trained musicians performing the performance evaluation or selection of video/audio recordings.

For Performers 3 and 4, the negative physical behaviors that they were instructed to exhibit showed a clear effect on the ratings of their performances. For both the question of performance quality and likelihood of future attendance, the audio-only scores were lower for the negative performance than for the positive. Considering that both performers were asked to play in a manner that greatly increased body tension, this result is consistent with Valentine's research on the Alexander Technique that showed that musicians with training in posture and body alignment generally produced better overall performances.⁴ The results also confirm Gruner's hypothesis that proper physical and visual control will relax the body and produce a better musical product.⁵ However,

³ Davidson, "What Type of Information is Conveyed in the Body Movements," 279-301.

⁴ Valentine, 188.

⁵ Gruner, 62.

for the audio-visual performances, there was no significant difference in scores between the negative and positive versions for each performer. While this could be a case of non-musician evaluators being unable or unwilling to make value judgments of body control and tension, it also supports the effect that McClaren noticed, where positive body language has a corresponding positive effect on overall performance but negative body language does not significantly detract.⁶

It is interesting to note that there is considerably greater variation in scores for the question of attendance versus quality, particularly for Performers 1 and 2, whose results supported the experimental hypothesis. Given the untrained nature of the body of evaluators (a more common cross-section of typical musical audiences), it is likely that asking them about future attendance is a better predictor of their overall perception of the performance than requesting a judgment of performance quality, something which many audience members may feel unqualified to do. Most of the related research on this topic asked observers to evaluate overall quality, expression, and more specific aspects of the performance but never was the question asked directly whether they would enjoy attending another performance. Further research is necessary to determine which types of performance judgments by non-performers most accurately reflect their evaluations.

Pedagogical Implications

Nearly every music teacher that took the Physical Behaviors Survey claimed to include body language and stage presence as a component of performance instruction. However, it is clear from the results of the survey that opinions differ widely on which

⁶ McClaren, 57.

specific physical behaviors contribute the most strongly to a sense of positive or negative body language. Additionally, it is likely that every teacher has his or her own unique methods for teaching these techniques, although some of the variance will depend on the physical characteristics of the instrument being taught. Based on the results of the Performance Evaluation Questionnaire, it is possible to make some pedagogical recommendations for including these elements in musical instruction.

The most strongly identified element as contributing to the perception of performance (from the PBS) was the negative reaction caused by visibly reacting to mistakes. Unfortunately, this was also the most difficult element to control in taping (explained further below) and these results were generally inconclusive. The negative clip from Performer 3 was the one that had some reactions to musical mistakes, and unfortunately, none of the results here were statistically significant. I do still believe that, with a larger sample size and more visually obvious reactions from the performer, this experimental hypothesis will be validated, but it was not shown to be so during the course of this research. It is possible, particularly for Performer 3, that the cumulative effects of showing reactions to mistakes led to greater inaccuracies in performance and a poorer musical product, a result that was identifiable from the ratings of audio-only recordings. Just as it proved to be extremely difficult to convince talented and well-socialized performers to display reactions to their mistakes, training this behavior out of less-experienced musicians will be equally difficult. Some recommendations include creating numerous opportunities for student performance (while demanding correct stage presence and physical behavior), using video recordings so that students can watch the entirety of

the performance, and using operant conditioning-type approaches (i.e. stopping a student every time he or she displays a visible reaction to a mistake) to stimulate awareness.

The other physical behavior that showed up quite frequently in the PBS was evidence of tension in body or instrumental motion. This was produced in the negative clips of both Performer 3 and 4. The results here that approached statistical significance show an effect with which many music teachers will be familiar—that excess body tension causes physical problems that also become apparent within the music itself. The negative behaviors exhibited by Performer 1 and 2 (particularly in the latter case) had less effect on the musical result, not causing as much physical body motion. For these two performers, survey participants who listened only to the audio rated the negative recording significantly higher than the positive clip. However, when watching the corresponding videos, the ratings were actually reversed (although neither of these two results were significant, they likely would have been with a larger sample size). Clearly, the particular negative behaviors exhibited by these performers had little effect on the musical delivery of their performance, and the difference in ratings can very likely be explained primarily by visual elements.

This was not the case for Performers 3 and 4. Both of these recordings showed lower scores for the negative clip among audience members who only listened to audio, but this effect was not duplicated for the video. It is likely that the excess tension that they were instructed to play with resulted in poorer performance than if they had played with their normal, relaxed posture and body movements. The implications here for instrumental pedagogy are that it might be possible to diagnose performance problems by first visually looking at the player's body language. Many students, not just those with

demonstrably poor posture and body position, might benefit from training in the Alexander Technique, which has shown positive results in a variety of musical settings.⁷ While this is not at all an unfamiliar concept to experienced teachers, having statistical research to back up pedagogical intuition might be a catalyst for some new developments in instruction. Also, the amount of movement displayed by musicians can greatly depend on the particular instrument. In this study, the trumpet and clarinet players had the least flexibility in arm and hand motions compared to the range of possibilities offered by the trombone, and especially the violin. String, piano, and percussion players are capable of controlling their facial expressions in ways that wind and brass players have little ability to do. And those instruments that are air powered may find a more restricted range of motion necessary to produce proper tone and technique. This is probably a contributing factor why those studies which compared evaluation results requiring a large range of motion exclusively used string and percussion instruments.⁸

As this study supports results from earlier research that audiovisual modes of delivery (although not tested here, it seems likely that live performance would show similar effects) lead to an increase in positive performance ratings, it would be prudent for teachers to place a corresponding emphasis in visual communication by their students.⁹ This could be accomplished through case studies (live or on video) of master performers, increased focus in student performance, and video-recording rehearsals and practice sessions. Almost as importantly, as current training for many musicians covers a

⁷ Valentine, 188.

⁸ Juchniewicz, 417-427; Davidson, "Visual Perception," 103-113; Broughton and Stevens, 137-153; McClaren, 54-58.

⁹ McClaren, 56-57; Gillespie, 216; Wapnick, Mazza, and Darrow, "Effects of Performer Attractiveness, Stage Behavior, and Dress on Violin Performance Evaluation," 514-515.

wide variety of performance, composition, pedagogy, and business components, it is worth noting that skills in physical body movement are useful in many different fields. For instance, teachers will need to be very aware of their body language in front of students to assure content delivery and maintain class control, techniques which could be of equal benefit to persons involved in sales or business.

Audience members and musical experience

It is not particularly surprising that, in this study, there was little correlation between scores on the quality and attendance questions and the amount of years that each audience member had played a musical instrument. Among the observers, only slightly over one third of the study participants played an instrument, and most for only several years. It is possible that some of the results would have achieved statistical significance with a larger group of participants who had formal music training. More disturbing was the significant result that the longer each audience member had played an instrument, the *less* likely they were to want to attend future concerts by performers in this study, and that the effect was greater for the videos that displayed positive physical behaviors. There are a few of possible explanations for these results. The majority of the instrument-playing segment of the population used here selected as their primary instrument guitar, bass guitar, or drums. In this case, it seems likely that the chosen style of music by those particular audience members was more naturally rock, pop, or country than any of the classical styles performed by the four performers. This might explain why the attendance ratings among musicians were generally lower than the corresponding ratings of quality of performance, even though the opposite was actually

true of the population at large. These audience members might be less likely to be influenced by the body language and physical behaviors of the performer since they had immediately made the decision that they wouldn't attend future performances in a style which they did not enjoy. It would have been interesting to see if this same reverse effect held for Performer 2, whose exaggerated negative performance elicited some of the most significant effects from the entire population. Unfortunately, the sample size of the observers who took part in this study (particularly those with musical training) was far too low to attempt this type of analysis. This would be a line of research that would be worth pursuing during future studies. The experimental hypothesis would be that trained musicians (particularly those trained in the same style that they would be listening to) would be less likely to be influenced by the stage presence and body language of a performer and would show less variance in their ratings between positive and negative clips. A further hypothesis would be that music teachers, long accustomed to working with students that display all types of physical behaviors, would be the least affected by visual cues and would focus almost entirely on aural elements to determine their ratings (particularly of performance quality). And finally, it would be a useful course of research to determine if observers who were trained on an instrument were more or less critical of a performer who also played that same instrument.

Clarifications on Methodology

While analyzing the data from this study, a few weak areas in methodology were discovered that, adjusted in future research of this type, could lead to more significant results. The first and most obvious came from a low sample size. While the pool of

audience members was enough to find significant results on some of the experimental questions, certain other results approached significant findings and may have reached them with a higher sample size. This study had anticipated the number of students enrolled in Enjoyment of Music during the spring semester of 2011 based upon the number that had enrolled in the fall. Unfortunately, this particular semester saw a significant drop in enrollment in this class. In addition, the attendance rates for this course were particularly low during the weeks that the study was run (approaching only 50% in a few sections), thus eliminating another large group of survey participants. In the future, it is the recommendation of the experimenter that similar studies be run over the course of multiple semesters, or as a better solution, at a larger university that enrolls more students in a Music Appreciation-type course.

The other concern with the study population involved its narrow range of age and specialization. The average age of survey participants was 22, not particularly representative of the population at large. In addition, this age group, especially those that are not trained musicians, tends to listen less to classical music than people of other ages which could explain some low ratings.¹⁰ The University of Louisiana-Monroe is home to an extremely large pharmacy and nursing program, and a large percentage of survey participants were involved in these professional programs—again, not necessarily representative of the population at large. The recommendation for future research would be to attempt to identify a sample of participants with a greater age range and field of specialization. Perhaps the best way to do that would be to conduct this type of research online, which would achieve more variance in the above two factors as well as achieving a much broader cross-section of geographic, regional, and cultural factors.

¹⁰ Dempster, 49.

Some other methodological concerns were discovered during the taping phase of the project. By using students at Indiana University, the project was assured talented, well-trained musicians who would easily be able to keep the aural and musical aspects of their performance consistent from one take to another. However, these particular musicians also have had much more performance experience than average music students, and have been doing so from a younger age. This meant that many of them were already well trained in techniques for using positive body language and stage presence in their performance, and were able to do so naturally and unconsciously. The result was that it was extremely difficult for the experimenter to coax poor physical behaviors out of any of the performers. Even when they felt like they were using extremely poor stage presence, it did not always appear noticeable from the perspective of an audience member, particularly on a video screen. Unfortunately, the one negative physical behavior that proved most difficult to coach performers to exhibit was the same one that was identified as most important by the PBS, showing a visible reaction to mistakes. In order to make these reactions seem as natural as possible, the experimenter instructed performers to pretend that a famous musician on their instrument was in the room, judging their performance. They were additionally asked to allow their eyes to glance over at the camera (representing the audience) upon mistakes. At times, the experimenter even tried to force a reaction by standing up and waving his arms upon hearing a musical mistake in order to distract the performer. Unfortunately, this was a trick that generally only worked once for each performer and still, because of their superb conditioning to not show these reactions, was not particularly effective. It is possible that many of the physical behaviors displayed by musicians, both positive and negative,

have become ingrained through long years of practice and performance and it will be difficult to modify them without also having an effect on the musical aspect of performance.

For future research, it would seem that there are two options for achieving more visible effects. The first would be to select performers with a wider variance in experience and training. While this would lead to more inconsistency in the musical results, a careful attempt can be made to identify musicians who *naturally* perform with some of the negative behaviors identified in the PBS. An additional survey stage would be undertaken before the evaluators received the videos. In this, the recordings would be screened without sound by a committee of evaluators (both trained and untrained musically) to determine which physical behaviors can be identified visually. Only the clips that were evaluated to significantly show the desired physical and visual characteristics would be shown to participants. The other option would be to have the experimenter serve as the model performer in all situations. This would allow for more specific research questions, as using the same model would eliminate any variables related to instrument, musical selection, and performer gender, dress, and appearance.

It would also be possible to conduct a similar version of this study by doing the stages in reverse order. A variety of performers would be recorded and evaluated by audience members who would either watch video clips or listen solely to audio. The survey results would be used to determine which performers showed the most significant quantifiable differences in survey results between the video and audio performances. These performers would be scrutinized carefully in an attempt to break down the particular elements of body language that may have contributed to the statistical

difference in evaluations. As in similar research studies, it will remain important to find a wide variety of performers with different backgrounds and levels of experience, and to also select as large a sample size of potential audience members as possible. Again, conducting the evaluations online might be the most effective method of reaching a diverse body of participants.

A final methodological concern that could be corrected in future research involves the media with which audience members viewed the performances, an issue that is common to all similar types of research studies. In an attempt to achieve consistency between musician and take, each performer was filmed with a still camera that captured the view of their entire body, face, and instrument. While this likely eliminated some confounding variables from the experimental results, it meant that the audience members were viewing a smaller and less-detailed image of each performer, without the close-up shots that would often accompany a professionally recorded production (although more similar to a live experience). This was exacerbated by the size of the screen on which audience members viewed the recordings—current technology is increasingly able to display extremely large images with very high levels of detail and this would be preferable for audiovisual studies. In future research of this type, it would be desirable to at least make sure that the images were displayed on a large screen that allowed audience members to properly view the detail and nuance of each performer's body language. Another possibility would be to use a multiple-camera setup that included close-up shots of each performer. This would be most effectively done if only one performer (i.e. the experimenter) was used as a model.

Applications for Future Research

So much of the experiential literature focusing on body language and stage presence describes those actions which take place *before* any music is played at all. Hagberg, Koronka, Sorel, and others take great care in explaining the perfect bow, the proper way to smile at one's audience, and the exact speed with which one walks from the stage door to playing position.¹¹ These behaviors share one important trait—they all deal with the concept of first impressions, the few seconds in which audience members make the greatest (and most significant) evaluative judgments.¹² Research into this important step in the performance process could start with a simple experiment using different lengths of time to evaluate a performer on recording. The control group would watch the performer walk out on stage and perform a short musical excerpt, similar to the procedure of the Performance Evaluation Questionnaire (PEQ). A second group of observers would view the initial walk plus only a few seconds of music. The final group would view only the actions preceding any music at all.

Assuming that this preliminary study showed results that indicate statistical similarities between the different lengths of time needed to make evaluations, further research could be conducted to determine which of the physical actions described by Hagberg and others showed the greatest effect on performance ratings. In the early part of the twenty-first century, does bowing to the audience make any impact? How is audience perception affected if the musician is smiling upon entering the stage versus a frown or deadpan expression? And does it matter how quickly one walks out onto the

¹¹ Hagberg, 13-17; Koronka, 62-63; Sorel, 30-34, Scharnberg, 46; Robbins, 33.

¹² McPherson and Schubert, 71-72.

stage? Statistical answers for these questions will go a long way towards developing a contemporary pedagogy of audience communication that involves (or even focuses on) physical movements and stage presence.

One of the most interesting future research projects that could come from this study involves the inverse of the basic hypothesis. Instead of testing whether the body language and stage presence of performers affects the perception of audience members viewing that performance, this project would ask whether being confident in their stage behavior could actually help a performer's musical ability, in effect testing Gruner's theories.¹³ This study would be conducted by initially identifying a range of negative performance behaviors and then developing pedagogical tools for correcting them. Several performers who initially exhibit these behaviors would be chosen and "coached" through the process of improving their stage presence. Throughout the process, audio and video recordings would be made of the performer playing the same short musical excerpt. Following the completion of the taping, the videos would be shown to a range of potential audience members to determine which received the most negative and positive ratings. This could be done with the sound either present or muted. Afterwards, additional research would be conducted by having audience members listen only to the audio versions of each recording. The experimental hypothesis is that audience members listening only to audio will more highly rate the recordings that also receive higher ratings under the audio-visual condition.

The taping of Performer 4 brought up a possible path for additional research that the current study was not able to properly pursue—whether memorized performance affects the perception of audience members. This question has been explored in some

¹³ Gruner, 62.

detail by Williamon, but a worthwhile experiment would be to test his finding using instruments that do not obscure so much of the body while playing (the Williamon study examined a solo cellist).¹⁴ A cursory look at the results from the PEQ seem to be consistent with the hypothesis that memorized performances are viewed more favorably than those with music. The quality ratings for Performer 4's video recorded performance were among the highest in the study, including both the positive and negative versions of his clip. The same result was found when participants were asked how likely they would be to attend future performances by Performer 4. This came despite the fact that the ratings for the same question were considerably lower when rated by participants who listened to audio only. These results by themselves are not enough to confirm the experimental hypothesis—what is needed is a study where audience members compare memorized and non-memorized versions of the same performance by the same musician. Given the importance that audiences place on visual stimuli, it seems very likely that being able to see more of the performer's body, face, and instrument, would make for a more attractive and compelling performance.

One final avenue for continued study involves the numerous styles of live musical performance which do not conform to the norms of Western recital behavior, particularly jazz, popular music, and music from non-Western cultures. While audience expectations of a performer's behavior would likely be extremely different (especially as related to how much and often the musician engaged in body movements and his or her interaction with the audience), the same pedagogical techniques could be used to determine which physical elements of performance in those styles are most conducive to a positively received performance. Further study along those lines is especially relevant to the young

¹⁴ Williamon, 84-95.

musician today, for whom the ability to perform in multiple genres and music that crosses stylistic boundaries is becoming the norm.

With the (comparatively) recent advent of digital recording techniques that allow a recording musician to literally put together a piece one note at a time, a new standard for technical perfection has developed that is difficult to match in live performance. And yet, reviews and accounts of superb performances rarely include statements such as "She didn't miss a single note." Surely there are other aspects to great musicianship that transcend pure technical competence, even brilliance. Based on large amounts of experiential accounts and statistical research, it seems likely that a significant component of this phenomenon is related to the stage deportment and physical presence of the performer. With additional research that shows that audiences, particularly those comprised of untrained musicians, respond more favorably to musical performances presented in a visual manner, there is a demonstrable need for additional pedagogical development in this area. Classical music has so often been, as Burkholder contends, likened to a museum, primarily rooted in the greatness of the past, and not to be touched or interacted with by the audience.¹⁵ It may be time for the community of classical musicians to show initiative in updating their craft, learning from the success of popular music to create vitality and viability in the years and centuries to come.

¹⁵ Burkholder, 115-134.

Appendix 1: Physical Behaviors Survey

Section 1

Out of this list of physical behaviors, please select which five (5) you feel contribute most strongly to a positively perceived instrumental performance. Use a rating scale from 1-5 where 1 is the behavior that contributes the most strongly, 2 contributes second-most strongly, and so on. Please rank five items only. You may use the blank spaces at the end of the list to write in additional behaviors.

- _____ Eye contact with audience
- _____ Straight, tall posture
- _____ Smiling before performance
- _____ Smiling after performance
- _____ Smooth, deep bow
- _____ Shoulder width stance with feet flat on floor
- _____ Smooth physical movements
- _____ Body language and facial expressions match the character of the music
- _____ Brisk, confident entrance to the stage
- _____ _____
- _____ _____

Section 2

Out of this list of physical behaviors, please select which five (5) you feel contribute most strongly to a negatively perceived instrumental performance. Use a rating scale from 1-5 where 1 is the behavior that contributes the most strongly, 2 contributes second-most strongly, and so on. Please rank five items only. You may use the blank spaces at the end of the list to write in additional behaviors.

- _____ Visible reaction to mistakes
- _____ Lack of physical movement
- _____ Frown or angry look
- _____ Excessive swaying or instrument movement
- _____ Stiff bow
- _____ Adjusting or cleaning instrument

- _____ Tapping foot
- _____ Physical movement out of character with the music
- _____ Visible tension in arms or shoulders
- _____ Body or face obscured by music stand
- _____
- _____

Section 3

Please answer the following questions for demographic purposes.

1. Gender:

_____ Female

_____ Male

2. Age: _____

3. Number of Years as a Teacher: _____

4. Instrument:

5. How important do you consider body language and stage presence to be in overall performance? Please rate from 1 (not at all important) to 5 (very important)

1 2 3 4 5

6. Do you teach body language or stage presence?

YES

NO

7. If yes, what do you emphasize?

Appendix 2: Results of Physical Behaviors Survey

Table 8: Frequencies for Positive Physical Behaviors

Physical Behavior*	Most Important	2 nd Most Important	3 rd Most Important	4 th Most Important	5 th Most Important	Not Important	Total Score**
Eye Contact with Audience	13	9	7	3	11	35	139
Straight, Tall Posture	5	5	12	11	6	39	109
Smiling Before Performance	8	11	14	11	6	28	154
Smiling After Performance	3	11	7	16	21	20	133
Smooth, Deep Bow	1	1	5	4	6	61	38
Shoulder Width Stance, Feet Flat	1	1	4	1	3	67	26
Smooth Physical Movements	18	15	9	15	6	15	213
Body Language Matches Music	20	10	6	3	9	30	173
Brisk, Confident Entrance to Stage	8	12	12	11	6	29	122
Other***	1	1	0	1	0	75	11

* For each physical behavior, shown above is the number of survey participants who marked it most important to a positively perceived performance, second most important, etc.

** Total scores were calculated by assigning five (5) points for each behavior marked "most important", four (4) points for "second most important", and down to one (1) point for "fifth most important". Behaviors unmarked were considered to be not important and received zero (0) points.

*** Responses for "other":

"A good controlled breath before performing/playing"

"Smooth, not so deep bow"

"Speaking to the audience"

"Unaware of audience during performance"

"Being just yourself in posture and facial expression and this is every time a little different"

"Convincing and inspired performance"

"Brisk and smooth exit from stage"

"Amount of time taken before the performance to tune, etc."

"Sorry, I don't think any of these contribute... have you considered the more obvious things like, preparation, breathing, repetition of the experience"

"Communicates with audience"
 "Doesn't hide behind music stand"
 "Personality"
 "Physical movement matching phrase shape"
 "General physical involvement in the music"

Table 9: Frequencies for Negative Physical Behaviors

Physical Behavior*	Most Important	2 nd Most Important	3 rd Most Important	4 th Most Important	5 th Most Important	Not Important	Total Score**
Visible Reaction to Mistakes	45	14	7	4	3	5	313
Lack of Physical Movement	3	4	8	4	12	47	75
Frown or Angry Look	9	17	10	9	7	26	168
Swaying or Inst. Movement	3	7	9	3	7	49	83
Stiff Bow	0	2	4	4	9	59	37
Adjusting or Cleaning Inst.	1	1	0	0	0	76	9
Tapping Foot	2	2	4	12	8	50	62
Movement Does Not Match Music	5	12	9	13	7	32	133
Tension in Arms or Shoulders	8	3	13	8	9	37	116
Body or Face Hidden by Stand	2	12	9	13	8	34	119
Other***	1	1	1	1	1	73	15

* For each physical behavior, shown above is the number of survey participants who marked it most important to a negatively perceived performance, second most important, etc.

** Total scores were calculated by assigning five (5) points for each behavior marked "most important", four (4) points for "second most important", and down to one (1) point for "fifth most important". Behaviors unmarked were considered to be not important and received zero (0) points.

***Responses for "other":

"Failure to acknowledge accompanist or other collaborating musicians"
 "A poor breath before playing"
 "No connection to the audience"
 "Not acknowledging piano accompanist"

"Walk onstage looks nervous (i.e. no eye contact with audience, bad posture, etc.)"

"You do all of this, when you feel insecure - not grounded"

"Verbal negative commentary from the performer while performing"

"Fidgeting"

"Never looking at audience"

"Lack of communication with audience--smiling eye contact"

"Attitude"

Responses to the survey question "What aspects of body language or stage presence do you emphasize in your teaching" (PBS Question #7):

"That your stage presence reflects that you enjoy being there and performing"

"All aspects you have touched on in the survey"

"Calm demeanor and communication with the audience"

"Posture, confident look"

"Making sure the audience can always see the percussionists play"

"Overall carriage"

"Learning to be grounded in the center of yourself and in the moment – that influences everything else"

"Show confidence"

"Lots of things"

"Reflecting the music through your body language"

"Posture, relaxation, confidence, eliminate unnecessary movement"

"Economy, relevance, clarity, perception by others"

"Remember that you are playing to an audience and you need to focus on communicating your message to that audience. You need to acknowledge them when coming on and off stage, and make sure that they can tell you are playing the music for them...not yourself. We need to remember that music is a communicative art and we need to focus on communication with our audience."

"Relaxation"

"Bowing properly, planned choreography, performing"

"Relax and breathe properly. Make audience relaxed with your demeanor. NO distractions from music."

"Overall body presence"

"Relax and let the music speak naturally. Look the part."

"Engaging the audience with body language"

"Making music"

"Moving in character with the character of the music"

"Portraying confidence"

"Instrument pointing at audience (best sound), no excessive movement, don't blow into stand, enjoy the moment"

"Confidence"

"Bowing properly, staying relaxed"

"Relaxation"
 "Exuding total confidence (regardless of how you actually feel!)"
 "Entering and exiting stage, bowing, attire, acknowledging collaborating musicians, speaking about the programmed repertoire"
 "Breathing; structural understanding (body map)"
 "Natural movement that connects to phrasing and colors desired"
 "Posture and control and relaxation with focus"
 "Relaxation, naturalness, comfort, ease"
 "The performer must be relaxed in order to play well, and engaged with the music in order to engage the audience."
 "Visual representation/expression of the music"
 "All aspects as all aspects are important"
 "Relaxation, communication with the audience"
 "Body mapping and communication"
 "Body language/stage presence is part of performance"
 "Not reacting negatively to things that do not go your way"
 "Anything to show an air of confidence. Being well prepared so as to have confidence."
 "Connecting with the audience, not showing physical response to mistakes, expressing confidence"
 "The aspects that promote a positive performance"
 "Communication"
 "Freedom of movement – not standing still, but not repetitive or tight"
 "Manners in general on stage and Feldenkrais when needed"
 "Portray a relaxed confidence, don't acknowledge mistakes, don't hide behind the stand, make deliberate motions and appear unhurried, stand wide and tall"
 "Smiling before and after a performance, good stance and posture"
 "Relaxation and not making facial gestures after mistakes"
 "Posture, breathing, and relaxation"
 "Good posture, stance, facial expressions, and movement"
 "Relaxation, stage etiquette before, during, and after a performance"
 "Professionalism, confidence"
 "Projecting the attitude that you want to be there"
 "Natural, but moderate, movement to enhance relaxation"
 "Body language, posture (at instrument, as well as coming on and off stage), facial expressions, reactions to mistakes"
 "Appearing relaxed & confident on stage, connecting with the audience"
 "Grace, broad shoulder/chest, gracious, humble"
 "Natural, relaxed engagement"
 "Relaxed yet confident posture and awareness of the 'fourth wall'"
 "Relaxation and poise. Understanding of performance responsibilities. Also, not dwelling on mistakes. Catching yourself doing things right."
 "Relaxation and appropriate physical movement, bowing, entry and exit, projection of confidence, non-reactive body language vis-à-vis error"
 "Pretty much everything you listed!"
 "That body language should help enhance the sound quality"

- "Comfort, ease of performance and communication with audience"
- "Positive entrance and exit, the bows, 'own the stage'"
- "Eye contact, smile, relaxed posture, bow"
- "Confidence"
- "Confidence sometimes can come from simply acting confident (faking it). Stand tall in a relaxed manner. Don't stiffen your legs but relax as if you are in the batter's box. Lower body is firm but not stiff, upper is relaxed and supported. Move with confidence not tension."
- "Bowing (full), placement of stand (not obstructing or not at all if possible), facial expression (matching music; usually pleasant), walking on and off (quickly and confidently), holding the instrument (secure, relaxed, matching others on stage), logistics (music, mutes, etc.), coordination with collaborative musicians (who leads, bowing, holding instrument, etc.), attire"
- "Show that you enjoy what you are doing"
- "Display confidence"
- "Interaction with audience. Relaxation. Posture."
- "Ease of movements, smiling, positively acknowledging audience and fellow performers"
- "Standing erect, positive communication"
- "Looking confident, pleasant, and not reacting to mistakes."
- "Matching the mood to movement/facial expression"
- "Sincerity of body related to music and breathing"
- "Comfort and lack of tension in breathing"
- "Smile!"
- "Natural movement related to internal emotion and/or harmonic goals"
- "Relaxed, outward orientation"
- "Projecting confidence and passion without detracting from the music. How to bow."
- "Confident appearance, allowing the audience to 'See' the music as well as hear it"
- "Avoid inappropriate/excessive actions/gestures"
- "Confidence/Relaxation/Moving quickly on and off stage"
- "Performing without tension and movement appropriate to the music"
- "Relaxation, natural movements/expression, audience connection"
- "Efficient, natural movement improves one's sound and technique"
- "Good posture. Relaxed control."
- "How to bow; purposeful demeanor; posture; angle to audience; stand height"
- "Smiling, ease of movement"
- "Bowing well, discreet water key use, eye contact, smile"
- "Breathing, ease, confidence"
- "Entering the stage, bowing, acknowledging the pianist, posture, movement, placement of music stand"
- "Correct posture; eye contact; smiling before and after; importance of taking a bow"
- "Absence of tension and being happy to perform"
- "Confidence, relaxation"

"Relaxation, ease of movement"

"I teach my students to never show when they've made a mistake in their facial expressions of body language. I also encourage them to always walk on stage and act 100% confident before, during, and after they play, even when they're nervous."

Appendix 3: Performance Evaluation Questionnaire

I.D. Number_____

Performance 1:

1.) On a scale from 1 (poor) to 9 (excellent), how would you rate the overall quality of this performance?

[illegible]

2.) On a scale from 1 (least likely) to 9 (most likely), how likely would you be to attend a complete recital or concert by this performer.

[illegible]

Performance 2:

3.) On a scale from 1 (poor) to 9 (excellent), how would you rate the overall quality of this performance?

[illegible]

4.) On a scale from 1 (least likely) to 9 (most likely), how likely would you be to attend a complete recital or concert by this performer.

[illegible]

Performance 3:

5.) On a scale from 1 (poor) to 9 (excellent), how would you rate the overall quality of this performance?

[illegible]

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